

produced by RJRTC

in
HUMPHREY

Civil District Court
Parish of Orleans
State of Louisiana

No. 96-8461

Division "K"

-----X
Gloria Scott, Et Al

versus

The American Tobacco Company, Inc., Et Al
-----X

Videotaped deposition of

Frank Paul Gullotta

taken on

November 9, 2000

951 East Byrd Street

Richmond, Virginia 23219

Stone-Pigman
COPY

Accu-Tech Court Reporters
225-665-1270 Fax 225-665-9059 Cell 225-315-1726
E-mail accutech@aol.net

Reported by: Betty C. Godso, RPR, CCR #87189

52299 8208

I N D E X

WITNESS	EXAMINATION BY	PAGE#
Frank Gullotta	Randy Hopper	4, 145
	Gay	139

E X H I B I T S

NUMBER	PAGE
GULLOTTA ONE	5
GULLOTTA TWO	5
GULLOTTA THREE	34
GULLOTTA FOUR	124
GULLOTTA FIVE	125

A P P E A R A N C E
For the Plaintiffs, Gloria Scott, Et al

Robert R. Hopper, Esq.
Zimmerman Reed
901 North Third Street
Minneapolis, Minnesota 55401
612 341-0400

Jonathan Shub, Esq.
Sheller, Ludig & Badey
1528 Walnut Street, 3rd Fl.
Philadelphia, PA 19102
215 790-7300

For the Defendants, Philip Morris

James P. Muehlberger, Esq.
(Not present)
Shook, Hardy & Bacon
One Kansas City Place
1200 Main Street
Kansas City, Missouri 64105-2118
816 474-6550

Charles F. Gay, Jr., Esq.
Scott E. Delacroix, Esq.
Adams and Reese, LLP
4500 One Shell Square
New Orleans, LA 70139
504 585-0295

Alfred T. McDonnell, Esq.
Arnold & Porter
1700 Lincoln Street, Ste. 4000
Denver, CO 80203-4540
303 863-2316

For the Defendants, R.J. Reynolds

Dorothy H. Wimberly, Attorney
(not present)
Stone, Pigman, Walther, Wittmann & Hutchinson
546 Carondelet Street
New Orleans, LA 70130-3588
504 581-3200

Kimberly Harlowe, Paralegal
Hunton and Williams

produced by R. ETC

in

HUMPHREY

10:05:56 AM

1 Thursday, November 9th, 2000.

2 Frank Gullotta,

3 HAVING BEEN PRODUCED AND FIRST DULY
4 SWORN, WAS EXAMINED AND TESTIFIED AS
5 FOLLOWS:

6 DIRECT EXAMINATION

10:11:31 AM

7 MR. HOPPER: Mr. Gullotta, as

10:11:32 AM

8 you just heard, my name is Randy

10:11:35 AM

9 Hopper and I'll be examining you

10:11:39 AM

10 today. Before we proceed with the

10:11:39 AM

11 questions, we have just a few

10:11:43 AM

12 housekeeping matters we need to

10:11:43 AM

13 take care of between counsel, if

10:11:43 AM

14 you wouldn't mind to be patient

10:11:45 AM

15 with me just a few minutes.

10:11:47 AM

16 One of the first things we
17 need to do is get the CMO-2 and the
18 notice on the record, Charlie.

10:11:54 AM

10:12:25 AM

19 For the purpose of the record,

10:12:27 AM

20 I'm entering in the notice of this

10:12:27 AM

21 deposition today noticing Frank

10:12:30 AM

22 Gullotta for purposes of this

10:12:31 AM

23 deposition in the captioned matter,

10:12:35 AM

24 and we will introduce it as

10:12:37 AM

25 Gullotta Number One.

10:12:39 AM 1 Similarly, we're introducing
10:12:52 AM 2 the Case Management Order Number 2,
10:12:52 AM 3 CMO-2, into the record for purposes
10:12:56 AM 4 of this deposition in the captioned
10:13:01 AM 5 matter.

6 (Whereupon, Gullotta Exhibits
7 One and Two were marked for
8 Identification.)

9 MR. HOPPER: Counsel, I don't
10 believe you need to see either one
11 of these, do you?

12 MR. GAY: No.

13 The only thing I'd like to do,
14 if you're finished with the
15 housekeeping, is to just make sure
16 we have an understanding that Dr.
10:13:16 AM 17 Gullotta would reserve the reading
10:13:18 AM 18 and signing of the deposition.

10:13:21 AM 19 MR. HOPPER: Certainly. That
10:13:50 AM 20 should complete the housekeeping
10:13:52 AM 21 matters.

10:13:52 AM 22 BY MR.. HOPPER:

10:14:00 AM 23 Q. Dr. Gullotta, I think you are
10:14:04 AM 24 aware but I would like to remind you
10:14:07 AM 25 that this deposition is not only being

10:14:09 AM 1 taken as a fact deposition but it's
10:14:12 AM 2 also being taken for trial purposes.
10:14:15 AM 3 So, at times throughout my questioning
10:14:19 AM 4 today, which you may be familiar with
10:14:19 AM 5 since you have been deposed before,
10:14:22 AM 6 I'll be asking you to state your
10:14:25 AM 7 answers for the Jury and just so there
10:14:29 AM 8 is no confusion or understanding,
10:14:29 AM 9 that's part of the purposes for the
10:14:30 AM 10 videotaping; is that understandable to
10:14:31 AM 11 you?

10:14:31 AM 12 A. Yes, it is.

10:14:31 AM 13 Q. Thank you.

10:14:35 AM 14 And just so you are clear,
10:14:37 AM 15 because there have been a number of
10:14:40 AM 16 different lawsuits, this lawsuit --
10:14:43 AM 17 and for the record -- is on behalf of
10:14:46 AM 18 the citizens of the State of Louisiana.
10:14:49 AM 19 Is that clear to you?

10:14:51 AM 20 A. Yes, it is.

10:15:06 AM 21 Q. I would to start the
10:15:08 AM 22 deposition Dr. Gullotta asking you to
10:15:14 AM 23 give me a quick rundown of your
10:15:21 AM 24 employment history over the last few
10:15:26 AM 25 years..

10:15:26 AM 1 A. The last few years, I have
10:15:29 AM 2 been working for Philip Morris USA.
10:15:33 AM 3 Q. And what would the dates of
10:15:35 AM 4 that be?
10:15:35 AM 5 A. Well, let's see. That would be
10:15:36 AM 6 from December of '92 to the present.
10:15:44 AM 7 No, I take that back. December '95 to
10:15:51 AM 8 the present.
10:15:52 AM 9 Q. And prior to December '95, who
10:15:56 AM 10 was your employer?
10:15:57 AM 11 A. It was Philip Morris
10:15:58 AM 12 International.
10:16:00 AM 13 Q. And you distinguish between
10:16:02 AM 14 Philip Morris International and Philip
10:16:05 AM 15 Morris USA?
10:16:06 AM 16 A. Right.
10:16:07 AM 17 Q. So from '95 to the present for
10:16:10 AM 18 the record, it's Philip Morris USA?
10:16:15 AM 19 A. Correct.
10:16:16 AM 20 Q. What were the dates you were
10:16:18 AM 21 employed by PMI then?
10:16:20 AM 22 A. PMI would have been from
10:16:21 AM 23 October '92 to December '95.
10:16:31 AM 24 Q. Prior to October '92, who was
10:16:33 AM 25 your employer?

10:16:34 AM 1 A. That was Philip Morris USA
10:16:37 AM 2 again.
10:16:39 AM 3 Q. When did you begin working for
10:16:42 AM 4 Philip Morris USA prior to October '92?
10:16:47 AM 5 A. That would have been July
10:16:49 AM 6 27th, 1977, from that date.
10:16:53 AM 7 Q. So July '77 to October '92?
10:16:58 AM 8 A. Yes.
10:17:02 AM 9 Q. You were at Philip Morris USA
10:17:04 AM 10 again?
10:17:06 AM 11 A. That's correct.
10:17:09 AM 12 Q. And keeping the rundown going,
10:17:12 AM 13 prior to July '77, who was your
10:17:16 AM 14 employer?
10:17:16 AM 15 A. I was employed for one year
10:17:19 AM 16 with the State University of New York
10:17:23 AM 17 at Albany.
10:17:28 AM 18 Q. That's not SUNY, is it?
10:17:33 AM 19 A. Yes, it was.
10:17:36 AM 20 Q. Stoneybrook?
10:17:38 AM 21 A. No, SUNY, Albany.
10:17:38 AM 22 Q. So, that would have been
10:17:39 AM 23 approximately July '76 to July '77?
10:17:42 AM 24 A. That's correct.
10:17:46 AM 25 Q. Have we covered your career by

10:17:49 AM 1 now, or is there employment prior to
10:17:53 AM 2 that?
10:17:55 AM 3 A. No. It was university before
10:17:58 AM 4 that.
10:17:58 AM 5 Q. When you were in school in
10:17:58 AM 6 training?
10:17:59 AM 7 A. Right.
10:17:59 AM 8 Q. That's a good point to switch
10:18:01 AM 9 to education. Can you give me a brief
10:18:05 AM 10 rundown of your education beginning
10:18:07 AM 11 with high school?
10:18:09 AM 12 A. I completed high school in
10:18:11 AM 13 Rockford, Illinois. Rockford West High
10:18:16 AM 14 School, and that would have been in
10:18:19 AM 15 1960.
10:18:21 AM 16 Q. When you graduated?
10:18:23 AM 17 A. Right.
10:18:23 AM 18 Q. And then in 1960, I believe
10:18:26 AM 19 from your C.V. that I just received
10:18:30 AM 20 this morning, you went to the
10:18:33 AM 21 University of New Mexico?
10:18:36 AM 22 A. Yes, I did. I started
10:18:38 AM 23 actually at the University of New
10:18:41 AM 24 Mexico, I think in, oh, gosh. Let me
10:18:45 AM 25 think. Well, I finished in '76. I

10:18:45 AM 1 think I started there in 1970.

10:18:53 AM 2 Q. Okay. In trying to understand

10:18:56 AM 3 this, you attended Los Angeles City

10:19:00 AM 4 College '65 to '68?

10:19:03 AM 5 A. That's correct.

10:19:04 AM 6 Q. Were you in school from '60 to

10:19:06 AM 7 '65?

10:19:07 AM 8 A. Part of the time, I was in

10:19:09 AM 9 school. Part of the time, I was in the

10:19:13 AM 10 Army.

10:19:13 AM 11 Q. So approximately from '60 to

10:19:16 AM 12 '65, you were in the Army?

10:19:19 AM 13 A. '62 to '65, I believe.

10:19:24 AM 14 Q. And from '60 to '62, where

10:19:29 AM 15 were you?

10:19:30 AM 16 A. I was a musician in Los

10:19:35 AM 17 Angeles.

10:19:46 AM 18 Q. Okay. Then you attended Los

10:19:54 AM 19 Angeles City College from '65 to '68?

10:19:57 AM 20 A. That's correct.

10:19:58 AM 21 Q. Did you obtain a degree in

10:20:01 AM 22 that college?

10:20:01 AM 23 A. No, I did not.

10:20:03 AM 24 Q. Then you went on to Cal State

10:20:06 AM 25 at Los Angeles, is that right?

10:20:09 AM 1 A. That's correct.

10:20:10 AM 2 Q. '68 to '70. And that is where

10:20:13 AM 3 you obtained your B.A. in psychology?

10:20:19 AM 4 A. That's correct.

10:20:34 AM 5 Q. And then according to your

10:20:37 AM 6 C.V., you went on at that point to the

10:20:40 AM 7 University in New Mexico and that is

10:20:44 AM 8 where you began your studies toward a

10:20:44 AM 9 Ph.D.?

10:20:51 AM 10 A. That's correct.

10:20:51 AM 11 Q. And that was from '70 to '76,

10:20:51 AM 12 for the record?

10:20:51 AM 13 A. That's correct.

10:20:51 AM 14 Q. And your major area of

10:20:53 AM 15 emphasis, according to your C.V., was

10:20:53 AM 16 physiological psychology; correct?

10:20:57 AM 17 A. That's correct.

10:20:58 AM 18 Q. And a minor emphasis was on

10:21:02 AM 19 the psychology of learning and

10:21:02 AM 20 comparative psychology; correct?

10:21:04 AM 21 A. That's correct.

10:21:05 AM 22 Q. When you list this collateral

10:21:08 AM 23 area of study as medical science, can

10:21:18 AM 24 you explain that for the Jury?

10:21:18 AM 25 A. Those were courses in

10:21:18 AM 1 neuroanatomy and neurophysiology
10:21:22 AM 2 basically.

10:21:38 AM 3 Q. And did you prepare and defend
10:21:41 AM 4 a dissertation for your Ph.D.?

10:21:46 AM 5 A. I did.

10:21:47 AM 6 Q. What was that in?

10:21:47 AM 7 A. That was in 1976.

10:21:50 AM 8 Q. What was the subject matter of
10:21:52 AM 9 that?

10:21:53 AM 10 A. The subject matter of that was
10:21:55 AM 11 I developed a model, an animal model,
10:21:57 AM 12 of temporal lobe epilepsy and looked at
10:21:58 AM 13 it for behavior disturbances.

10:22:02 AM 14 Q. All right.

10:22:11 AM 15 Did you begin doing work at
10:22:15 AM 16 that time on your Ph.D. with the EEG?

10:22:21 AM 17 A. Yes, that's right.

10:22:25 AM 18 Q. For the Jury's sake, can you
10:22:29 AM 19 explain what the EEG is,
10:22:32 AM 20 electroencephalography; is that
10:22:35 AM 21 correct?

10:22:35 AM 22 A. Yes. When I was doing it in
10:22:35 AM 23 experimental animals, I was putting
10:22:35 AM 24 electrodes on the surface of the brain
10:22:35 AM 25 and recording the electrical responses

10:22:38 AM 1 of the brain.

10:22:39 AM 2 When I moved on to human work,

10:22:43 AM 3 I put the electrodes on the surface of

10:22:46 AM 4 the scalp and mapped the electrical

10:22:50 AM 5 activity that went on under the sites

10:22:53 AM 6 of the electrode.

10:22:57 AM 7 Q. Did you become certified at

10:23:00 AM 8 that point in the process of obtaining

10:23:03 AM 9 your Ph.D. in electroencephalography?

10:23:08 AM 10 A. No.

10:23:08 AM 11 Q. Did you do any extracurricular

10:23:11 AM 12 study or preparation in the development

10:23:14 AM 13 and use of the electroencephalography?

10:23:19 AM 14 A. I'm not sure I understand your

10:23:21 AM 15 question, sir.

10:23:22 AM 16 Q. I'm trying to understand if

10:23:24 AM 17 you did any additional study or

10:23:26 AM 18 preparation in the use of the EEG or in

10:23:31 AM 19 the reading of the EEGs, or anything of

10:23:35 AM 20 that nature?

10:23:36 AM 21 A. I attend a lot of seminars. I

10:23:40 AM 22 was taught both human and animal

10:23:43 AM 23 electroencephalography and then I had a

10:23:48 AM 24 lot of on-the-job experience.

10:23:50 AM 25 Q. Are you familiar with Dr. E.

10:23:53 AM 1 Roy Johns?

10:23:55 AM 2 A. Yes, I am.

3 Q. And who is he?

4 A. He is a very famous

5 neurophysiologist.

6 Q. Is he, in addition to being

7 one of the most famous

8 neurophysiologists, is he considered to

10:24:03 AM 9 be one of the leading developers of the

10:24:06 AM 10 EEG?

10:24:08 AM 11 A. Well, he was certainly among

10:24:10 AM 12 the founders of that technique, yeah.

10:24:14 AM 13 Q. Do you know him personally?

10:24:16 AM 14 A. Yes, I do.

10:24:17 AM 15 Q. Have you worked with him?

10:24:19 AM 16 A. No.

10:24:19 AM 17 Q. You know him professionally

10:24:21 AM 18 and through various professional

10:24:24 AM 19 affiliations, would that be accurate?

10:24:28 AM 20 A. That's correct, yes.

10:24:32 AM 21 Q. In your work in EEG sciences

10:24:36 AM 22 since your Ph.D. and through your

10:24:39 AM 23 professional affiliations, have you

10:24:41 AM 24 ever met a Dr. John K. Nash?

10:24:45 AM 25 A. The name is not familiar to

10:24:47 AM 1 me.

10:24:47 AM 2 Q. Is or is not?

10:24:48 AM 3 A. Is not.

10:24:48 AM 4 Q. Are you familiar with Q-EEG?

10:24:52 AM 5 A. Quantitative EEG, a little

10:24:55 AM 6 bit.

10:24:56 AM 7 Q. Can you describe for the Jury

10:24:59 AM 8 what that is?

10:25:00 AM 9 A. I can't give you it to you in

10:25:02 AM 10 any detail because I never used it. It

10:25:06 AM 11 just has to do with being able to

10:25:10 AM 12 attach numbers to the EEG wave form.

10:25:10 AM 13 Q. So, once you produce the brain

10:25:13 AM 14 waves through the use of the EEG, then

10:25:14 AM 15 you provide a quantitative composite

10:25:19 AM 16 for those various brains waves and the

10:25:23 AM 17 states that are produced; is that

10:25:27 AM 18 accurate?

10:25:28 AM 19 A. That's my understanding but I

10:25:30 AM 20 don't know it in detail.

10:25:42 AM 21 Q. Okay.

10:25:42 AM 22 I notice on your C.V. that you

10:25:46 AM 23 are a member of an organization called

10:25:48 AM 24 the International Brain Research

10:25:51 AM 25 Organization?

10:25:51 AM 1 A. That's correct.

10:25:52 AM 2 Q. Would you consider yourself to

10:25:54 AM 3 be a brain researcher?

10:25:56 AM 4 A. Yes, I would.

10:25:59 AM 5 Q. Would that be on the human

10:26:02 AM 6 brain?

10:26:03 AM 7 A. For the most part, yes.

10:26:06 AM 8 Q. But it would also include

10:26:08 AM 9 various animal or mammal brains, or

10:26:08 AM 10 non-mammal brains, I suppose?

10:26:12 AM 11 A. I have done that as well.

10:26:16 AM 12 Q. Would you consider that you

10:26:20 AM 13 have expertise given your training in

10:26:23 AM 14 neuroanatomy and neurophysiology in

10:26:27 AM 15 brain science and the neuroscience

10:26:30 AM 16 associated with the brain?

10:26:32 AM 17 A. I would say I know quite a bit

10:26:35 AM 18 about it.

10:26:36 AM 19 Q. As well as brain chemistry?

10:26:38 AM 20 A. Not so much.

10:26:44 AM 21 Q. What is the Association for

10:26:47 AM 22 Chemoreception Science?

10:26:50 AM 23 A. It's a taste and smell

10:26:52 AM 24 organization.

10:27:02 AM 25 Q. How long have they been in

10:27:04 AM 1 existence, do you know?

10:27:06 AM 2 A. Approximately twenty years.

10:27:11 AM 3 Q. Do you know who founded that

10:27:13 AM 4 organization?

10:27:16 AM 5 A. No, I don't think so.

10:27:18 AM 6 Q. You weren't involved in the

10:27:20 AM 7 development of that organization?

10:27:22 AM 8 A. No.

10:27:23 AM 9 Q. You have been a member of it

10:27:25 AM 10 for how long?

10:27:26 AM 11 A. I would say approximately

10:27:29 AM 12 since about 1982 or '83.

10:27:39 AM 13 Q. Have you been a very active

10:27:41 AM 14 member in that society?

10:27:45 AM 15 A. In the sense that I normally

10:27:48 AM 16 attend their annual meetings.

10:27:52 AM 17 Q. Where are they based?

10:27:54 AM 18 A. Most of the time, they are in

10:27:57 AM 19 Sarasota, Florida. If I understand

10:28:00 AM 20 your question correctly.

10:28:00 AM 21 Q. I may have misled you. I

10:28:00 AM 22 apologize. Where is the organization

10:28:01 AM 23 itself domiciled? Where is it located?

10:28:03 AM 24 A. Its headquarters is somewhere

10:28:06 AM 25 in Florida but I don't recall exactly

10:28:08 AM 1 where now.

10:28:09 AM 2 Q. Have you been involved as an
10:28:12 AM 3 officer or any kind of Board of
10:28:15 AM 4 Director beyond your membership?

10:28:19 AM 5 A. For a couple of years, I was
10:28:21 AM 6 the industrial liaison to that society.

10:28:30 AM 7 Q. But you have never been on the
10:28:33 AM 8 Board or one of the officers of that
10:28:38 AM 9 organization?

10:28:38 AM 10 A. No, I haven't.

10:28:40 AM 11 Q. What about the Society for
10:28:41 AM 12 Neurosciences, where are they located?

10:28:41 AM 13 A. Their head office is in
10:28:43 AM 14 Washington, D.C.

10:28:51 AM 15 Q. How long have you been a
10:28:52 AM 16 member of that society?

10:28:54 AM 17 A. Since 1977, approximately.

10:29:03 AM 18 Q. What kind of things does that
10:29:06 AM 19 organization focus on?

10:29:08 AM 20 A. Oh, gosh. I was afraid you
10:29:10 AM 21 were going to ask that. Every aspect
10:29:14 AM 22 of neurosciences. To give you an
10:29:18 AM 23 example, the meeting this year was
10:29:21 AM 24 twenty-five thousand people.

10:29:22 AM 25 Q. So, it's quite a large

10:29:24 AM 1 organization?

10:29:25 AM 2 A. It's huge.

10:29:26 AM 3 Q. Have you been involved as an
10:29:30 AM 4 officer or director or some leadership
10:29:33 AM 5 role in that organization?

10:29:34 AM 6 A. No, I have not.

10:29:36 AM 7 Q. Beyond your membership then,
10:29:46 AM 8 you have done nothing else with that
10:29:46 AM 9 organization?

10:29:46 AM 10 A. Other than attend annual
10:29:46 AM 11 meetings, no.

10:29:46 AM 12 Q. And then looking further in
10:29:46 AM 13 your C.V., you show that you have been
10:29:49 AM 14 a member of the Society for

10:29:49 AM 15 Psychophysiological Research, correct?

10:29:50 AM 16 A. That's correct.

10:29:51 AM 17 Q. How long have you been a
10:29:53 AM 18 member there?

10:29:54 AM 19 A. Approximately since 1977.

10:29:58 AM 20 Q. Again, have you been an
10:30:02 AM 21 officer or director in a leadership
10:30:06 AM 22 role in that organization?

10:30:08 AM 23 A. No, I have not.

10:30:10 AM 24 Q. I forgot to ask you also. In
10:30:10 AM 25 the Society for Neurosciences, were you

10:30:12 AM 1 involved, or have you been involved in
10:30:14 AM 2 the founding or the development of that
10:30:16 AM 3 organization in any way?

10:30:18 AM 4 A. No, I have not.

10:30:19 AM 5 Q. And the same question for the
10:30:21 AM 6 Society for Psychophysiological
10:30:25 AM 7 Research?

10:30:26 AM 8 A. No, I have not.

10:30:27 AM 9 Q. Where is that organization
10:30:30 AM 10 located -- Psychophysiological Research
10:30:35 AM 11 Society?

10:30:36 AM 12 A. I'm sorry, I can't give you an
10:30:37 AM 13 answer to that. I don't know.

10:30:39 AM 14 Q. So you basically only attended
10:30:43 AM 15 their annual meetings from
10:30:47 AM 16 time-to-time?

10:30:47 AM 17 A. That's correct?

10:30:48 AM 18 Q. Throughout your career?

10:30:50 AM 19 A. That's correct.

10:30:51 AM 20 Q. Have you presented papers or
10:30:53 AM 21 given talks or lectures at any of these
10:30:56 AM 22 various meetings for these
10:30:59 AM 23 organizations you have attended over
10:31:02 AM 24 the years?

10:31:02 AM 25 A. I have.

10:31:03 AM 1 Q. Would any of those be included
10:31:06 AM 2 in the list of publications and papers
10:31:10 AM 3 in your C.V.?

10:31:12 AM 4 A. That last publication, I gave
10:31:16 AM 5 a poster session on a satellite meeting
10:31:17 AM 6 for the neurosciences a few days ago.

10:31:18 AM 7 Q. And that is the one with D.
10:31:21 AM 8 Fitzpatrick on the use of canine --

10:31:23 AM 9 A. No. It's reverse chronology,
10:31:25 AM 10 so it would be at the top of the list.

10:31:29 AM 11 Q. The Electrophysiological and
10:31:33 AM 12 Subjective Effects of Smoking
10:31:34 AM 13 Cigarettes?

10:31:35 AM 14 A. That's right.

10:31:40 AM 15 Q. So for the record, you show a
10:31:44 AM 16 publication and a paper authored by you
10:31:49 AM 17 and by an M. Kuhn and a K. VonHolt, and
10:31:54 AM 18 a G. Heintze, and it's titled, "The
10:32:01 AM 19 Electrophysiological and Subjective
10:32:03 AM 20 Effects of Smoking Cigarettes with
10:32:08 AM 21 equal tar but different nicotine
10:32:12 AM 22 levels."

10:32:12 AM 23 Now, you show that, a
10:32:15 AM 24 manuscript in preparation. I assume
10:32:15 AM 25 that's completed now since the time

10:32:19 AM 1 your C.V. Has been prepared?

10:32:19 AM 2 A. It's in revision.

10:32:21 AM 3 Q. Okay. But you presented

10:32:24 AM 4 basically a discussion or a paper,

10:32:28 AM 5 excuse me, a lecture on that in this

10:32:39 AM 6 meeting of the Society for

10:32:47 AM 7 Neurosciences; is that correct?

10:32:49 AM 8 A. Yes. It was a poster

10:32:51 AM 9 presentation.

10:32:52 AM 10 Q. What is a poster presentation?

10:32:54 AM 11 A. You put up an intro, the

10:32:58 AM 12 results, and some illustrations and

10:33:02 AM 13 some discussion and you stand in front

10:33:05 AM 14 of it and people come by and ask you

10:33:07 AM 15 about it.

10:33:08 AM 16 Q. So, it's a little bit like a

10:33:11 AM 17 trade show in that regard?

10:33:14 AM 18 A. I would imagine it would be

10:33:16 AM 19 like that, yeah.

10:33:20 AM 20 Q. When you refer in the title of

10:33:28 AM 21 this paper of equal tar but different

10:33:30 AM 22 nicotine levels, what are you referring

10:33:34 AM 23 to there?

10:33:35 AM 24 A. I'm referring to cigarettes

10:33:37 AM 25 that we had prepared in such a manner

10:33:41 AM 1 that tar was held constant and nicotine
10:33:46 AM 2 varied.

10:33:46 AM 3 Q. Would that be a conventional
10:33:49 AM 4 cigarette?

10:33:49 AM 5 MR. GAY: Object to the form.

10:33:51 AM 6 A. I'm not really sure what you
10:33:54 AM 7 mean.

10:33:54 AM 8 Q. Fair enough.

10:33:55 AM 9 When I use the term

10:33:57 AM 10 conventional -- and perhaps your

10:33:59 AM 11 counsel's right, I should clarify

10:33:59 AM 12 that -- I'm referring to a cigarette

10:34:02 AM 13 that burns, pyrolyzes the tobacco,

10:34:09 AM 14 versus one that heats or that's of a

10:34:14 AM 15 different type of delivery?

10:34:16 AM 16 A. That's correct.

10:34:16 AM 17 Q. So it would be a conventional
10:34:19 AM 18 cigarette?

10:34:20 AM 19 A. In that sense, it's a

10:34:22 AM 20 conventional cigarette.

10:34:23 AM 21 Q. Is that what you thought I

10:34:26 AM 22 meant as a conventional cigarette when

10:34:29 AM 23 I asked you the question?

10:34:31 AM 24 A. No, I didn't.

10:34:33 AM 25 MR. GAY: Object to the form.

10:34:33 AM 1 BY MR. HOPPER:

10:34:35 AM 2 Q. Go ahead. You can answer.

10:34:37 AM 3 A. No, I didn't.

10:34:38 AM 4 Q. What did you think I meant
10:34:38 AM 5 when I asked you about a conventional
10:34:39 AM 6 cigarette?

10:34:39 AM 7 A. I thought you were talking
10:34:41 AM 8 about brands.

10:34:41 AM 9 Q. Okay. Various types of
10:34:44 AM 10 cigarettes then?

10:34:49 AM 11 MR. GAY: Object to the form.

10:34:51 AM 12 A. Yes.

10:34:51 AM 13 BY MR. HOPPER:

10:34:56 AM 14 Q. How do you hold tar constant
10:35:02 AM 15 but vary the level of nicotine in a
10:35:04 AM 16 cigarette?

10:35:05 AM 17 A. Well, what we did was we took
10:35:07 AM 18 a single lot of tobacco, we extracted
10:35:11 AM 19 half of it with supercritical CO2 and
10:35:16 AM 20 then we blended it in various
10:35:19 AM 21 proportions.

10:35:23 AM 22 Q. So, through that process, the
10:35:26 AM 23 supercritical process, you are able to
10:35:29 AM 24 adjust and change the level of nicotine
10:35:33 AM 25 in a cigarette?

10:35:35 AM 1 A. Yes.

10:35:36 AM 2 Q. Regulate the level of nicotine

10:35:39 AM 3 in a cigarette?

10:35:41 AM 4 A. Extract with supercritical

10:35:43 AM 5 CO₂. You can extract nicotine and a

10:35:48 AM 6 few other things come out.

10:35:50 AM 7 Q. Correct. I'm familiar with

10:35:50 AM 8 that.

10:35:50 AM 9 And you add it back in,

10:35:52 AM 10 correct?

10:35:53 AM 11 A. We take the extracted and

10:35:56 AM 12 unextracted tobacco and blend them back

10:36:02 AM 13 together.

10:36:03 AM 14 Q. So the nicotine gets added

10:36:05 AM 15 back?

10:36:05 AM 16 MR. GAY: Object to the form.

10:36:06 AM 17 A. Well, the tobacco gets added

10:36:09 AM 18 back.

19 BY MR. HOPPER:

20 Q. But it has nicotine in it,

21 correct?

22 A. It has the normal nicotine in

23 it, yeah.

10:36:09 AM 24 Q. The alkaloids remain in there

10:36:12 AM 25 and they are added back in, correct?

10:36:15 AM 1 A. That's right.

10:36:16 AM 2 Q. Okay. What motivated you to
10:36:23 AM 3 focus on the electrophysiology and
10:36:26 AM 4 subjective effects of smoking
10:36:29 AM 5 cigarettes with equal tar but different
10:36:31 AM 6 nicotine levels?

10:36:33 AM 7 A. We had previously done a study
10:36:36 AM 8 like that and we used cigarettes which
10:36:39 AM 9 were extracted of nicotine and then
10:36:42 AM 10 oversprayed with nicotine and we had
10:36:46 AM 11 some reason to believe that those
10:36:49 AM 12 cigarettes might differ from the
10:36:53 AM 13 naturally occurring endogenous
10:36:57 AM 14 nicotine, so we redid the study.

10:37:51 AM 15 Q. Dr. Gullotta, if I'm correct
10:37:54 AM 16 again in looking at your C.V., all of
10:37:58 AM 17 your professional employment experience
10:38:02 AM 18 has been with Philip Morris in one or
10:38:06 AM 19 another of its divisions; is that
10:38:09 AM 20 correct?

10:38:10 AM 21 A. That's correct, except the
10:38:13 AM 22 time I was at SUNY.

10:38:13 AM 23 Q. The one year at SUNY?

10:38:15 AM 24 A. Yeah.

10:38:15 AM 25 Q. What did you do at SUNY prior

10:38:18 AM 1 to coming to Philip Morris?

10:38:20 AM 2 A. I taught -- what did I teach?

10:38:24 AM 3 I taught undergraduate psychology. I

10:38:30 AM 4 think it was introductory psychology

10:38:33 AM 5 and I taught graduate perception, I

10:38:43 AM 6 believe.

10:39:02 AM 7 Q. Of the list of publications

10:39:03 AM 8 and papers in your C.V., have any of

10:39:09 AM 9 these been peer-reviewed?

10:39:12 AM 10 A. Yes.

10:39:12 AM 11 Q. Which ones? Can you identify?

10:39:15 AM 12 I can show you the list if you need me

10:39:19 AM 13 to.

10:39:19 AM 14 A. Well, the one in epilepsy was

10:39:23 AM 15 peer-reviewed, I know, and the one that

10:39:27 AM 16 is in preparation will be

10:39:30 AM 17 peer-reviewed.

10:39:31 AM 18 Q. Is that, "The Effects of

10:39:34 AM 19 Experimental Epilepsy in the Behavior

10:39:41 AM 20 of Cats"?

10:39:43 AM 21 A. That's right.

10:39:45 AM 22 Q. Which other one did you

10:39:47 AM 23 identify?

10:39:48 AM 24 A. There are some other ones on

10:39:50 AM 25 there. I would have to look at the

10:39:53 AM 1 list.

10:40:00 AM 2 The Feeney and Gullotta in the

10:40:01 AM 3 Brain Research Organization; Wagner, et

10:40:08 AM 4 al in Neurophysiology.

10:40:11 AM 5 Q. Could you just put a check

10:40:14 AM 6 mark beside those for me so I can

10:40:15 AM 7 follow up when you return that copy to

10:40:19 AM 8 me.

10:40:19 AM 9 A. Sure.

10:40:19 AM 10 Here and here and I don't know

10:40:21 AM 11 about that. And this one here. Here

10:40:26 AM 12 you go.

10:40:26 AM 13 Q. Thank you, sir.

10:40:29 AM 14 A. Sure.

10:40:34 AM 15 Q. So, the paper or publication

10:40:36 AM 16 titled, "Hyposexuality produced by

10:40:36 AM 17 Temporal-lobe Epilepsy in the Cat" for

10:40:36 AM 18 Epilepsia, that was peer-reviewed in

10:40:46 AM 19 '98?

10:40:46 AM 20 A. Yes.

10:40:47 AM 21 Q. And the first paper that we

10:40:51 AM 22 spoke about a moment ago that you

10:40:53 AM 23 delivered recently as a poster, that

10:40:59 AM 24 has been peer-reviewed?

10:41:00 AM 25 A. Not yet.

52299 8235

10:41:02 AM 1 Q. Is in the process of being
10:41:05 AM 2 peer-reviewed?
10:41:06 AM 3 A. It's in the process of going
10:41:08 AM 4 through the submission process.
10:41:12 AM 5 Q. Okay. And then, "The
10:41:12 AM 6 Suppression of Seizure Discharges and
10:41:16 AM 7 Sleep spindles by lesions of the
10:41:16 AM 8 rostral thalamus," that's been
10:41:17 AM 9 peer-reviewed?
10:41:18 AM 10 A. Is that the Brain Research
10:41:20 AM 11 article?
10:41:21 AM 12 Q. Yes.
10:41:22 AM 13 A. Yes.
10:41:22 AM 14 Q. Why is it that you are
10:41:24 AM 15 uncertain by the canine plasma paper
10:41:29 AM 16 being peer-reviewed?
10:41:31 AM 17 A. Because I can't remember
10:41:32 AM 18 whether that journal is peer-reviewed
10:41:35 AM 19 or not.
10:41:36 AM 20 Q. That journal being the
10:41:39 AM 21 Behavior Methods Research
10:41:39 AM 22 Instrumentation?
10:41:45 AM 23 A. That's correct.
10:42:13 AM 24 Q. Are these papers based upon
10:42:15 AM 25 research that you actually conducted?

10:42:18 AM 1 A. That's correct.

10:42:19 AM 2 Q. The ones that were

10:42:20 AM 3 peer-reviewed?

10:42:21 AM 4 A. That's correct.

10:42:22 AM 5 Q. Did you conduct this research

10:42:24 AM 6 in the Philip Morris labs?

10:42:28 AM 7 A. The first one was conducted in

10:42:31 AM 8 Philip Morris laboratories but that has

10:42:34 AM 9 not gone to peer-review yet but will.

10:42:34 AM 10 Q. I understand.

10:42:39 AM 11 A. The others were not.

10:42:40 AM 12 Q. I assume looking at your C.V.,

10:42:44 AM 13 that that research was perhaps

10:42:46 AM 14 conducted at various universities or

10:42:50 AM 15 colleges; is that correct?

10:42:51 AM 16 A. That's correct.

10:43:17 AM 17 Q. Professionally, would you

10:43:19 AM 18 describe yourself as an experimental

10:43:22 AM 19 psychologist, or as a physiological

10:43:23 AM 20 psychologist, or how would you describe

10:43:25 AM 21 yourself publically perhaps?

10:43:30 AM 22 A. I guess I would describe

10:43:32 AM 23 myself as an experimental psychologist

10:43:37 AM 24 with a field of expertise in

10:43:41 AM 25 physiological psychology.

10:43:44 AM 1 Q. From your C.V. once again, I
10:43:49 AM 2 notice that you have a title here you
10:43:51 AM 3 refer to as relevant work experience?

10:43:54 AM 4 A. Yes.

10:43:59 AM 5 Q. And all of this as I can tell
10:44:02 AM 6 refers to your work at Philip Morris;
10:44:07 AM 7 is that correct?

10:44:08 AM 8 A. I'm sorry. I haven't looked
10:44:11 AM 9 at my vitae in a while.

10:44:16 AM 10 (Perusing document.)

10:44:21 AM 11 No, not all of it.

10:44:26 AM 12 Q. Can you distinguish those
10:44:31 AM 13 relevant work experiences at Philip
10:44:34 AM 14 Morris and those that are not, for the
10:44:37 AM 15 jury?

10:44:44 AM 16 A. Well, the ones where -- it's
10:44:47 AM 17 complicated. Adjunct Assistant
10:44:47 AM 18 Professor in Psychology at Virginia
10:44:54 AM 19 Commonwealth University was while I was
10:44:59 AM 20 working at Philip Morris but not -- but
10:45:03 AM 21 that had nothing to do with Philip
10:45:06 AM 22 Morris.

10:45:06 AM 23 And then this Visiting
10:45:08 AM 24 Assistant Professor down here at SUNY,
10:45:11 AM 25 Albany, and Research Assistant,

10:45:11 AM 1 Department of Psychology, Assistant
10:45:18 AM 2 again, and Assistant Director, Animal
10:45:18 AM 3 Vivarium, those were having to do with
10:45:21 AM 4 academic kinds of positions, nothing to
10:45:25 AM 5 do with the company.

10:45:26 AM 6 Q. Okay. Thank you. Are you
10:45:56 AM 7 still currently teaching at any college
10:45:59 AM 8 or university?

10:46:01 AM 9 A. Unfortunately, no.

10:46:03 AM 10 Q. Why do you say unfortunately?

10:46:07 AM 11 A. I have been offered positions
10:46:09 AM 12 but haven't been able to take them
10:46:12 AM 13 because I travel so much.

10:46:15 AM 14 Q. I see. Does Philip Morris
10:46:16 AM 15 encourage you to teach or hold teaching
10:46:20 AM 16 posts or discourage you from doing
10:46:25 AM 17 that?

10:46:26 AM 18 A. They encourage us.

10:46:35 AM 19 Q. It appears to me in the upper
10:46:39 AM 20 left-hand corner, for purposes of the
10:46:43 AM 21 record, that this C.V. is dated the
10:46:46 AM 22 23rd of August '94. That's a long time
10:46:49 AM 23 ago. Is there anything new in your
10:46:54 AM 24 C.V. that is not shown on the actual
10:46:58 AM 25 document itself that you would tell me

10:47:01 AM 1 about?

10:47:02 AM 2 A. I think that is probably not
10:47:03 AM 3 true. I probably updated it since then
10:47:07 AM 4 because I have a publication in
10:47:10 AM 5 manuscript and I have a '98 publication
10:47:14 AM 6 on there.

10:47:17 AM 7 Q. I'll show you the document
10:47:19 AM 8 again. And do you see that date in the
10:47:22 AM 9 upper left-hand corner?

10:47:24 AM 10 A. Yes. Oh, I see it. 23 August
10:47:32 AM 11 '94. I don't know how that got there.
10:47:33 AM 12 I think it wasn't taken off when I made
10:47:36 AM 13 the revisions.

10:47:37 AM 14 Q. So, it's fair to say that you
10:47:41 AM 15 have updated the actual document we are
10:47:43 AM 16 looking at?

10:47:44 AM 17 A. That's correct.

10:47:45 AM 18 Q. Can you tell me, and for the
10:47:47 AM 19 purpose of the Jury to be clear, do you
10:47:48 AM 20 know when this was last updated?

10:47:51 AM 21 A. Within the last year.

10:47:52 AM 22 Q. So, you would consider this to
10:47:55 AM 23 be a current C.V.?

10:47:57 AM 24 A. Yes.

10:48:02 AM 25 Q. Is there anything that you

10:48:03 AM 1 would add that's not on the document
10:48:05 AM 2 itself right now that I should know
10:48:08 AM 3 about?

10:48:09 AM 4 A. Just that poster presentation
10:48:12 AM 5 I made on neurosciences on the same
10:48:17 AM 6 topic as that paper.

10:48:21 AM 7 Q. It doesn't show your age on
10:48:21 AM 8 here. Can you tell the Jury your age,
10:48:22 AM 9 please.

10:48:22 AM 10 A. Yes. I'm fifty-eight years
10:48:25 AM 11 old.

10:48:35 AM 12 Q. Dr. Gullotta, we may come back
10:48:38 AM 13 to your C.V. a little later in the
10:48:38 AM 14 deposition, but right now, I'm going to
10:48:43 AM 15 admit this as an exhibit as Gullotta
10:48:47 AM 16 Number Three.

10:48:47 AM 17 (Whereupon, the document was
10:48:47 AM 18 marked as Exhibit No. 3 for
10:48:55 AM 19 Identification.)

10:48:55 AM 20 MR. HOPPER: Counsel, is there
10:48:56 AM 21 any reason you'd want to see it?

10:49:06 AM 22 MR. GAY: No, that's fine.

10:49:06 AM 23 BY MR. HOPPER:

10:49:10 AM 24 Q. Dr. Gullotta, have you
10:49:12 AM 25 testified in other litigation prior to

10:49:17 AM 1 today?

10:49:17 AM 2 A. I have.

10:49:20 AM 3 Q. Have all of those times that
10:49:22 AM 4 you have testified been in your

10:49:25 AM 5 capacity at Philip Morris as a research
10:49:27 AM 6 scientist there?

10:49:31 AM 7 A. That's right.

10:49:33 AM 8 Q. Have you been involved in
10:49:35 AM 9 litigation other than litigation
10:49:37 AM 10 against Philip Morris or the tobacco
10:49:39 AM 11 industry?

10:49:40 AM 12 A. I don't think so.

10:49:41 AM 13 Q. So, you haven't testified in
10:49:43 AM 14 any other trials or any other oral
10:49:48 AM 15 testimony by deposition in any cases
10:49:48 AM 16 outside litigation against the tobacco
10:49:50 AM 17 industry or Philip Morris?

10:49:51 AM 18 A. No.

10:49:51 AM 19 Q. Do you recall the times you've
10:49:53 AM 20 testified in tobacco litigation in the
10:49:56 AM 21 past?

10:49:57 AM 22 A. To some degree, yes.

10:49:59 AM 23 Q. Can you identify those cases
10:50:01 AM 24 or the instances?

10:50:03 AM 25 A. Well, I testified in -- I

10:50:08 AM 1 guess it was Forcina, State of New York
10:50:13 AM 2 case, and -- let's see.

10:50:19 AM 3 I testified for the Maryland
10:50:24 AM 4 case, class action, I believe it was. I
10:50:31 AM 5 testified in Iron Workers in
10:50:34 AM 6 Pennsylvania, and one more that is
10:50:40 AM 7 escaping me right now.

10:50:42 AM 8 Q. Would that be the Small case
10:50:43 AM 9 in New York?

10:50:43 AM 10 A. No

10:50:45 AM 11 Q. The class action in New York?

10:51:05 AM 12 A. No.

10:51:05 AM 13 MR. MCDONNELL: The Engle
10:51:05 AM 14 case, I think.

10:51:10 AM 15 A. The Engle case, that's right,
10:51:13 AM 16 in Florida.

10:51:14 AM 17 Q. And you sat for depositions in
10:51:16 AM 18 all of those cases?

10:51:18 AM 19 A. Yes.

10:51:18 AM 20 Q. Did you testify at trial in
10:51:21 AM 21 any of those cases?

10:51:22 AM 22 A. No.

10:51:22 AM 23 Q. You didn't testify at trial in
10:51:27 AM 24 Engle?

10:51:28 AM 25 A. No.

10:51:29 AM 1 Q. Do you know if you were
10:51:30 AM 2 produced by Philip Morris as an expert
10:51:34 AM 3 witness in any of those cases?
10:51:36 AM 4 A. To the best of my knowledge,
10:51:38 AM 5 no.
10:51:46 AM 6 Q. Are you familiar with any of
10:51:49 AM 7 the expert witnesses that are produced
10:51:51 AM 8 in this case on behalf of Philip
10:51:55 AM 9 Morris?
10:51:58 AM 10 A. I don't know. I really don't.
10:52:00 AM 11 Q. You haven't conferred with any
10:52:03 AM 12 of those expert witnesses?
10:52:05 AM 13 A. About this case.
10:52:06 AM 14 Q. Yes.
10:52:07 AM 15 A. No.
10:52:12 AM 16 Q. Other than your attorneys,
10:52:13 AM 17 have you met with anyone in preparation
10:52:16 AM 18 for your deposition today?
10:52:19 AM 19 A. No.
10:52:19 AM 20 Q. You haven't met with any type
10:52:22 AM 21 of deposition coaches or acting coaches
10:52:26 AM 22 or consultants or anyone like that?
10:52:31 AM 23 A. With respect to this case, no.
10:52:34 AM 24 Q. What about with respect to any
10:52:38 AM 25 of these other cases you just told me

10:52:41 AM 1 about?

10:52:41 AM 2 A. Yes, I had some preparation
10:52:45 AM 3 for another case.

10:52:46 AM 4 Q. Who did you meet with in
10:52:49 AM 5 preparation for those other cases.

10:52:52 AM 6 MR. GAY: Object to the form.

10:52:53 AM 7 A. I was on the witness list and
10:52:55 AM 8 was prepared to give testimony in

10:52:59 AM 9 Minnesota and I met with a jury

10:53:02 AM 10 consultant, I mean a witness

10:53:03 AM 11 consultant, but I don't recall the name
10:53:06 AM 12 of the person.

10:53:16 AM 13 Q. Had you met with any other
10:53:18 AM 14 witness or jury consultants in Engle or
10:53:23 AM 15 Forcina or the iron worker's case?

10:53:26 AM 16 A. No.

10:53:27 AM 17 Q. Have you had any other
10:53:29 AM 18 training or preparation as a witness
10:53:29 AM 19 for any of this litigation from anyone
10:53:30 AM 20 else?

10:53:31 AM 21 A. No.

10:53:31 AM 22 Q. And you didn't meet with any
10:53:33 AM 23 type of coaches or witness consultants
10:53:35 AM 24 for this deposition today?

10:53:38 AM 25 A. No.

10:53:42 AM 1 Q. Did you review any documents
10:53:44 AM 2 in preparation for your deposition
10:53:47 AM 3 today?

10:53:48 AM 4 A. Yes, I did.

10:53:49 AM 5 Q. What would that have been?

10:53:50 AM 6 A. I read about a month ago my
10:53:53 AM 7 previous depositions.

10:53:54 AM 8 Q. Of all these cases?

10:53:57 AM 9 A. Yes.

10:54:12 AM 10 Q. Did you read the actual
10:54:15 AM 11 depositions or summaries of the
10:54:17 AM 12 depositions?

10:54:17 AM 13 A. I read the depositions.

10:54:22 AM 14 Q. And then did you discuss those
10:54:24 AM 15 depositions with anyone other than your
10:54:27 AM 16 attorneys?

10:54:28 AM 17 A. No.

10:54:28 AM 18 Q. Did you meet with any of your
10:54:30 AM 19 colleagues at Philip Morris to discuss
10:54:33 AM 20 your deposition today prior to today?

10:54:36 AM 21 A. No.

10:54:38 AM 22 Q. Did you meet with any of the
10:54:39 AM 23 in-house counsel or lawyers at Philip
10:54:43 AM 24 Morris with regard to this deposition
10:54:45 AM 25 today?

10:54:47 AM 1 A. I don't think so.

10:54:48 AM 2 Q. You don't remember or you

10:54:51 AM 3 didn't?

10:54:52 AM 4 A. Probably not.

10:54:55 AM 5 Q. Are you not sure because

10:54:57 AM 6 sometimes it's hard to tell who is

10:55:01 AM 7 inside counsel and who's outside

10:55:04 AM 8 counsel?

10:55:06 AM 9 A. No. It's because I have

10:55:07 AM 10 talked to inside counsel on a number of

10:55:10 AM 11 occasions but I don't think I ever

10:55:13 AM 12 discussed this case.

10:55:15 AM 13 Q. This case being the Scott case

10:55:18 AM 14 where you're testifying today?

10:55:20 AM 15 A. Correct.

10:55:22 AM 16 Q. You didn't meet with or

10:55:22 AM 17 discuss, to the best of your knowledge,

10:55:23 AM 18 with any in-house counsel with Philip

10:55:26 AM 19 Morris?

10:55:27 AM 20 A. That's correct.

10:55:28 AM 21 Q. Then, you met with your

10:55:30 AM 22 attorneys in preparation for this

10:55:33 AM 23 deposition today?

10:55:34 AM 24 A. That's correct.

10:55:34 AM 25 Q. Would that be Mr. Gay and Mr.

52299 8247

10:55:43 AM 1 McDonnell?

10:55:43 AM 2 A. And one other person on one

10:55:46 AM 3 other occasion.

10:55:50 AM 4 Q. Who would that have been?

10:55:53 AM 5 A. A Mr. Harkness.

10:56:03 AM 6 Q. Do you know which law firm Mr.

10:56:07 AM 7 Harkness is associated with?

10:56:09 AM 8 A. No, I don't.

10:56:10 AM 9 Q. Counsel, do you know?

10:56:12 AM 10 MR. GAY: Yes, I know.

10:56:12 AM 11 MR. HOPPER: Would you mind to

10:56:12 AM 12 tell me.

10:56:18 AM 13 MR. GAY: I'm not here to

10:56:18 AM 14 answer questions, but I think it's

10:56:19 AM 15 David, Polk.

10:56:23 AM 16 MR. HOPPER: Thank you.

10:56:23 AM 17 BY MR. HOPPER:

10:56:30 AM 18 Q. When did you meet with Mr.

10:56:31 AM 19 Harkness, McDonnell and Mr. Gay? On

10:56:37 AM 20 separate occasions?

10:56:39 AM 21 A. Sometimes they were separate

10:56:41 AM 22 and sometimes together but I don't

10:56:43 AM 23 think Mr. Gay ever met with Mr.

10:56:47 AM 24 Harkness.

10:56:47 AM 25 Q. Do you recall when you met

10:56:49 AM 1 with your attorneys in preparation for
10:56:51 AM 2 this deposition?

10:56:53 AM 3 A. I do, I think.

10:56:54 AM 4 Q. Can you tell the Jury when
10:56:57 AM 5 that is?

10:56:58 AM 6 A. It was approximately a month
10:57:00 AM 7 ago, and then it was yesterday and the
10:57:03 AM 8 day before.

10:57:04 AM 9 Q. So that would have been the
10:57:06 AM 10 7th and the 8th of November of 2000
10:57:11 AM 11 then, correct?

10:57:12 AM 12 A. That's correct.

10:57:13 AM 13 Q. And then sometime
10:57:15 AM 14 approximately in October?

10:57:16 AM 15 A. That's correct.

10:57:17 AM 16 Q. And about how many hours did
10:57:20 AM 17 you meet in total time with all those
10:57:24 AM 18 three attorneys you met with?

10:57:26 AM 19 A. The first time was a few
10:57:31 AM 20 hours, maybe three or four hours, and
10:57:35 AM 21 then there is one occasion I'm
10:57:46 AM 22 forgetting in here, I think.

10:57:46 AM 23 No, it was only on three
10:57:47 AM 24 separate times, I think. I just
10:57:47 AM 25 remember one meeting was relatively

10:57:50 AM 1 short, just a couple of hours, and then
10:57:53 AM 2 yesterday and the day before, we met
10:57:55 AM 3 for about six hours on each occasion,
10:57:59 AM 4 including lunch and all of that.

10:58:03 AM 5 Q. Did they have you review
10:58:15 AM 6 documents other than the depositions
10:58:15 AM 7 you have looked at in the past in those
10:58:15 AM 8 meetings?

10:58:15 AM 9 A. No.

10:58:15 AM 10 Q. Have you looked at any of the
10:58:15 AM 11 expert witness reports of the
10:58:19 AM 12 plaintiff's experts in this case?

10:58:21 AM 13 A. No, I haven't.

10:58:21 AM 14 Q. Have you looked at any of the
10:58:24 AM 15 work or research or reports or papers
10:58:28 AM 16 that might have been produced by any of
10:58:31 AM 17 these experts?

10:58:32 AM 18 A. In this case?

10:58:33 AM 19 Q. In this case?

10:58:34 AM 20 A. No.

10:58:36 AM 21 Q. Are you familiar with the work
10:58:38 AM 22 of Dr. Ken Burns?

10:58:41 AM 23 A. I know the name. I can't
10:58:44 AM 24 recall whether I have -- I know the
10:58:47 AM 25 name.

10:58:48 AM 1 Q. And do you know Bill Farone?

10:58:52 AM 2 A. Yes.

10:58:53 AM 3 Q. Did you work with Bill Farone?

10:58:56 AM 4 A. No.

10:58:56 AM 5 Q. You never worked with him?

10:58:59 AM 6 A. No.

10:58:59 AM 7 Q. You never worked for him?

10:59:00 AM 8 A. No.

10:59:00 AM 9 Q. You never reported to him?

10:59:00 AM 10 A. No.

10:59:02 AM 11 Q. Did he ever report to you?

10:59:04 AM 12 A. No.

10:59:05 AM 13 Q. You were colleagues in R & D

10:59:10 AM 14 at Philip Morris together, is that how

10:59:12 AM 15 you characterize it?

10:59:14 AM 16 A. He was contemporary with me at

10:59:18 AM 17 Philip Morris for some period of time.

10:59:21 AM 18 Q. Did you join the company at

10:59:23 AM 19 about the same time?

10:59:24 AM 20 A. Approximately.

10:59:25 AM 21 Q. Do you know what year that

10:59:26 AM 22 was?

10:59:27 AM 23 A. No, I don't.

10:59:39 AM 24 Q. Are you being compensated to

10:59:41 AM 25 testify today, Dr. Gullotta?

10:59:43 AM 1 A. Just my normal salary.

10:59:46 AM 2 Q. So, you are taking time away

10:59:49 AM 3 from your normal routine and work

10:59:52 AM 4 responsibilities to testify today?

10:59:54 AM 5 A. That's correct.

10:59:54 AM 6 Q. And you are receiving no

10:59:56 AM 7 separate pay for that?

10:59:58 AM 8 A. That's correct.

11:00:01 AM 9 Q. Do you hold stock options with

11:00:04 AM 10 Philip Morris?

11:00:05 AM 11 A. No.

11:00:05 AM 12 Q. Do you hold any type of stock

11:00:08 AM 13 with Philip Morris, preferred or

11:00:10 AM 14 otherwise?

11:00:10 AM 15 A. Yes.

11:00:14 AM 16 Q. Is that stock that has been

11:00:16 AM 17 given to you as a part of your

11:00:18 AM 18 compensation at Philip Morris?

11:00:21 AM 19 A. Some of it is.

11:00:23 AM 20 Q. Is it some you have purchased

11:00:25 AM 21 separately?

11:00:27 AM 22 A. Some is.

11:00:28 AM 23 Q. Is some of it held in a type

11:00:32 AM 24 of retirement plan, a 401-K or

11:00:32 AM 25 otherwise?

11:00:39 AM 1 A. That's correct.

11:00:39 AM 2 Q. Is all of it located in that

11:00:43 AM 3 type of a portfolio?

11:00:45 AM 4 A. No. I have some on my own.

11:00:48 AM 5 Q. Do you recall how much stock

11:00:49 AM 6 you hold in the company?

11:00:52 AM 7 MR. GAY: Object to the form.

11:00:53 AM 8 Q. How many shares?

11:00:54 AM 9 A. Approximately.

11:00:55 AM 10 Q. Can you tell the Jury

11:00:57 AM 11 approximately how many shares you hold?

11:01:02 AM 12 A. As part of my deferred profit

11:01:05 AM 13 sharing account, I probably have ten

11:01:09 AM 14 thousand shares.

11:01:42 AM 15 Q. Have you reviewed any of your

11:01:45 AM 16 past research in preparation for this

11:01:48 AM 17 deposition today?

11:01:50 AM 18 A. In which sense, reviewed?

11:01:53 AM 19 Q. Any of the research documents

11:01:54 AM 20 that you may have produced over the

11:01:58 AM 21 years?

11:01:58 AM 22 A. No.

11:02:16 AM 23 Q. Do you recall the dates of

11:02:32 AM 24 peer-review of any of the articles you

11:02:35 AM 25 identified on your C.V.?

11:02:39 AM 1 A. They would have to be before
11:02:40 AM 2 publication, so sometime in the
11:02:42 AM 3 preceding six months or a year, they
11:02:46 AM 4 would have been peer-reviewed.

11:02:49 AM 5 Q. And are all of those
11:02:51 AM 6 publications dated on your C.V.?

11:02:58 AM 7 A. Yes.

11:02:58 AM 8 Q. Okay. Thank you.

11:03:36 AM 9 MR. HOPPER: Let's take a
11:03:37 AM 10 break for about five minutes.

11:03:45 AM 11 Videographer: We are going
11:03:48 AM 12 off the record at approximately
11:03:48 AM 13 11:02.

11:03:54 AM 14 (FOLLOWING A BRIEF RECESS, THE
11:03:54 AM 15 FOLLOWING PROCEEDINGS WERE HAD:)

11:17:24 AM 16 Videographer: We are back on
11:17:26 AM 17 the record at approximately 11:16.

11:17:26 AM 18 MR. HOPPER: Counsel and I
11:17:26 AM 19 conferred off the record during the
11:17:32 AM 20 break and he was right to point
11:17:32 AM 21 out, I believe, I had made a
11:17:32 AM 22 statement initially to Dr. Gullotta
11:17:32 AM 23 that plaintiffs were
11:17:45 AM 24 representing -- he was testifying
11:17:46 AM 25 to the citizens of Louisiana, and I

11:17:50 AM 1 believe correctly that should be
11:17:52 AM 2 stated that we are representing,
11:17:54 AM 3 plaintiffs are representing, a
11:17:56 AM 4 class of smokers as defined by the
11:18:01 AM 5 class definition in the CMO-2 and
11:18:07 AM 6 that's the more accurate way to
11:18:14 AM 7 reflect this.

11:18:14 AM 8 Counsel, would you add or
11:18:14 AM 9 change anything else.

11:18:15 AM 10 MR. GAY: That's fine.

11:18:15 AM 11 BY MR. HOPPER:

11:18:15 AM 12 Q. Dr. Gullotta, I know from past
11:18:18 AM 13 testimony that you have provided that
11:18:19 AM 14 you have done an extensive amount of
11:18:22 AM 15 work on basic EEG studies; is that
11:18:26 AM 16 correct?

11:18:26 AM 17 A. Yes.

11:18:28 AM 18 Q. And that's been while you were
11:18:31 AM 19 at Philip Morris primarily?

11:18:33 AM 20 A. Yes.

11:18:34 AM 21 Q. And that has been while you
11:18:35 AM 22 were a member of the Behavioral
11:18:38 AM 23 Research Group at Philip Morris?

11:18:40 AM 24 A. Part of the time.

11:18:41 AM 25 Q. Is that also what's known as

11:18:45 AM 1 the Biochemical Research Division?

11:18:50 AM 2 A. No.

11:18:50 AM 3 Q. Can you tell me, is there a
11:18:52 AM 4 Biochemical Research Division?

11:18:56 AM 5 A. I don't know if there is
11:18:56 AM 6 currently a Biochemical Research
11:18:56 AM 7 Division.

11:18:59 AM 8 Q. There was, however?

11:18:59 AM 9 A. Yes.

11:18:59 AM 10 Q. And you worked in that
11:19:01 AM 11 division at one point, correct?

11:19:04 AM 12 A. That's correct.

11:19:05 AM 13 Q. And you did evoke potential
11:19:14 AM 14 studies?

11:19:14 AM 15 A. That's correct.

11:19:16 AM 16 Q. Can you describe for the Jury
11:19:16 AM 17 what an evoke potential study is.

11:19:16 AM 18 A. Well, evoke potential is part
11:19:19 AM 19 of the EEG or electroencephalogram but
11:19:24 AM 20 it's a kind of EEG where a stimulus is
11:19:28 AM 21 provided to the subject and that
11:19:30 AM 22 stimulus could be an external stimulus
11:19:33 AM 23 like a light, or sound, or smell, or it
11:19:36 AM 24 can be internal stimulus, like asking
11:19:37 AM 25 the subject to make a judgment.

11:19:40 AM 1 And what you do is you attach
11:19:42 AM 2 electrodes to the scalp, you present
11:19:46 AM 3 the subject with some stimulus or
11:19:49 AM 4 another, say a light, and you record
11:19:52 AM 5 that part of the EEG which is related
11:19:54 AM 6 to the onset of that light. And you
11:19:57 AM 7 tell the computer to ignore the rest of
11:20:00 AM 8 the EEG and only pay attention to that
11:20:04 AM 9 part that's related to the stimulus
11:20:07 AM 10 that you gave the subject.

11:20:09 AM 11 And depending upon the kind of
11:20:12 AM 12 evoke potential, you can get an average
11:20:12 AM 13 response to that stimulus in anywhere
11:20:16 AM 14 from ten to two thousand presentations
11:20:19 AM 15 of the stimulus.

11:20:21 AM 16 Q. How do you measure that evoke
11:20:21 AM 17 potential with the computer?

11:20:21 AM 18 A. With cursors.

11:20:28 AM 19 Q. I apologize. Sorry to
11:20:28 AM 20 interrupt. Let me restate that.

11:20:31 AM 21 How do you measure the
11:20:32 AM 22 response you get from the EEG when an
11:20:37 AM 23 evoke potential stimulus is added?

11:20:44 AM 24 A. Well, basically, what you get
11:20:44 AM 25 when you're done with your averaging

11:20:45 AM 1 technique, is you get a vaguely
11:20:47 AM 2 sinusoidal wave form and it has
11:20:51 AM 3 characteristics of latency and
11:20:55 AM 4 amplitude.

11:20:57 AM 5 And latency is measured from
11:20:57 AM 6 the time the stimulus reaches the
11:21:00 AM 7 organ, its target organ, to you record
11:21:01 AM 8 the response in the brain, and the
11:21:03 AM 9 amplitudes are measured either from an
11:21:06 AM 10 isoelectric baseline to the top of a
11:21:16 AM 11 given peak, or more commonly, from the
11:21:16 AM 12 trough of one peak to the peak of
11:21:19 AM 13 another peak.

11:21:22 AM 14 Q. And what have you examined in
11:21:26 AM 15 the way of evoke potentials using EEG
11:21:30 AM 16 while at Philip Morris?

11:21:32 AM 17 A. I have looked at auditory
11:21:36 AM 18 middle, late latency evoke potentials.
11:21:40 AM 19 I have looked at auditory brain stem
11:21:43 AM 20 potentials. I have looked at evoke
11:21:47 AM 21 potentials to flashes of light. I have
11:21:50 AM 22 looked at pattern reversal evoke
11:21:54 AM 23 potentials. I have looked at olfactory
11:21:54 AM 24 evoke potentials.

11:21:56 AM 25 Q. Why were you looking at

11:21:58 AM 1 auditory and at light?

11:22:01 AM 2 A. I was trying to find evoke
11:22:03 AM 3 potentials that were sensitive to
11:22:07 AM 4 cigarette smoke but had little
11:22:09 AM 5 variability.

11:22:09 AM 6 Q. Help me understand and explain
11:22:12 AM 7 for the Jury how light and some aural
11:22:19 AM 8 effect relates to smoking.

11:22:24 AM 9 A. Well, I found they didn't do
11:22:26 AM 10 it very well.

11:22:27 AM 11 Q. That what?

11:22:29 AM 12 A. Auditory and flash evoke
11:22:32 AM 13 potentials were not useful in recording
11:22:36 AM 14 responses to smoking.

11:22:37 AM 15 Q. Is that because it's primarily
11:22:40 AM 16 a stimulus related to taste and smell?

11:22:44 AM 17 A. Those are not taste and smell
11:22:47 AM 18 evoke potentials. The olfactory ones I
11:22:47 AM 19 did were.

11:22:53 AM 20 Q. Yes, that's what I'm saying.
11:22:53 AM 21 I'm distinguishing light and auditory
11:22:53 AM 22 from those, correct?

11:22:59 AM 23 A. Yes. The reason why they were
11:23:04 AM 24 not useful in looking at smoking is
11:23:09 AM 25 because they were too variable both

11:23:16 AM 1 within people and between people.

11:23:17 AM 2 Q. You referred a moment ago to
11:23:19 AM 3 the pattern reversal, or what is known
11:23:22 AM 4 as the PREP. Can you describe what
11:23:25 AM 5 that is for the Jury?

11:23:27 AM 6 A. All right. That is an evoke
11:23:30 AM 7 potential. We normally put electrodes
11:23:31 AM 8 over the occipital cortex reference to
11:23:36 AM 9 an electrical --

11:23:36 AM 10 Q. Let me stop you right there.
11:23:36 AM 11 Because of the Jury, we want to be sure
11:23:40 AM 12 they understand.

11:23:40 AM 13 Occipital being? Could you
11:23:40 AM 14 just point, perhaps.

11:23:43 AM 15 A. Yeah, back here.

11:23:44 AM 16 Q. At the base of the cerebellum,
11:23:46 AM 17 correct?

11:23:47 AM 18 A. That is primary visual cortex
11:23:51 AM 19 in humans.

11:23:53 AM 20 So, we put several electrodes
11:23:53 AM 21 back there. We put a reference
11:23:56 AM 22 electrode in the middle of the head.

11:23:58 AM 23 Q. The mid-brain?

11:23:59 AM 24 A. Yes. Kind of on the major
11:24:04 AM 25 focus there.

11:24:05 AM 1 And then we put ground
11:24:08 AM 2 electrodes on the ear and we put
11:24:12 AM 3 artifact monitor over the eye. The
11:24:16 AM 4 subject sits a meter in front of the
11:24:20 AM 5 screen -- this is my procedure.
11:24:20 AM 6 Q. I understand.
11:24:22 AM 7 A. The subject sits a meter in
11:24:22 AM 8 front of the screen and there is a
11:24:23 AM 9 pattern on the screen that is black and
11:24:28 AM 10 white, it looks like a checkerboard,
11:24:31 AM 11 and the position of the black and white
11:24:34 AM 12 squares apparently change at an
11:24:39 AM 13 experimenter controlled rate. In my
11:24:39 AM 14 case, it was two per second.
11:24:41 AM 15 And also, there was a little
11:24:41 AM 16 light on the middle of the screen that
11:24:44 AM 17 came on randomly that we asked the
11:24:48 AM 18 subjects to count the number of times
11:24:52 AM 19 it came on just to keep their
11:24:52 AM 20 concentration on the center of the
11:24:53 AM 21 screen.
11:24:53 AM 22 And we would take the EEG
11:24:53 AM 23 resulting from that pattern moving and
11:24:56 AM 24 we would feed it through amplifiers and
11:25:01 AM 25 then into computers and do some

11:25:01 AM 1 computer averages and then we would
11:25:04 AM 2 have a response.

11:25:06 AM 3 Q. Just quickly, that last
11:25:07 AM 4 comment you made -- test for the
11:25:11 AM 5 amplitude -- how do you test for the
11:25:11 AM 6 latency?

11:25:13 AM 7 A. Latency, you put a cursor over
11:25:16 AM 8 one of the four major parts of the wave
11:25:18 AM 9 form and it tells you time from
11:25:18 AM 10 stimulus onset to when that event
11:25:22 AM 11 occurred.

11:25:24 AM 12 Q. Okay. And now isn't it true
11:25:26 AM 13 that you have tested smokers while
11:25:29 AM 14 employing this various PREP type study;
11:25:34 AM 15 correct?

11:25:34 AM 16 A. Among others, yes.

11:25:36 AM 17 Q. The PREP being the pattern
11:25:39 AM 18 reversal?

11:25:41 AM 19 A. Right.

11:25:41 AM 20 Q. Forgetting about among others
11:25:42 AM 21 for the moment, the question is, you
11:25:42 AM 22 have tested smokers; correct?

11:25:44 AM 23 A. That's correct.

11:25:45 AM 24 Q. Human smokers?

11:25:47 AM 25 A. That's correct.

11:25:53 AM 1 Q. And you have done those
11:25:57 AM 2 studies, sir, both here in the Richmond
11:26:00 AM 3 laboratories as well as elsewhere,
11:26:03 AM 4 correct?

11:26:03 AM 5 A. That's correct.

11:26:04 AM 6 Q. And, in fact, you have done
11:26:06 AM 7 those PREP type or pattern reversal
11:26:10 AM 8 studies while at INBIFO in Germany;
11:26:15 AM 9 correct?

11:26:15 AM 10 A. That's correct.

11:26:16 AM 11 Q. Can you describe the
11:26:19 AM 12 experiments and the studies that you
11:26:20 AM 13 did while in INBIFO.

11:26:20 AM 14 A. The major study I did there is
11:26:23 AM 15 the result of the publication, that
11:26:25 AM 16 most recent publication.

11:26:25 AM 17 Q. Sure.

11:26:27 AM 18 A. In Germany we, of course, did
11:26:30 AM 19 not use subjects, internal subjects.
11:26:35 AM 20 We solicited and had checked thirty
11:26:43 AM 21 male volunteers. The study had an
11:26:47 AM 22 outside study director, Professor
11:26:51 AM 23 Heintza, on there and an internal study
11:26:54 AM 24 directory, which was me, and we did
11:26:58 AM 25 pattern reversals before and after

11:27:00 AM 1 smoking on these thirty volunteers in
11:27:07 AM 2 response to cigarettes with varying
11:27:09 AM 3 nicotine but constant tar and the
11:27:13 AM 4 results are what I presented at the
11:27:15 AM 5 neurosciences meeting.

11:27:18 AM 6 Q. Now, in your testimony that
11:27:19 AM 7 you just now provided in answer to that
11:27:22 AM 8 question, you referred to, and we can
11:27:23 AM 9 have her read it back, if necessary,
11:27:23 AM 10 internal subjects.

11:27:23 AM 11 A. Right.

11:27:25 AM 12 Q. I think the distinction you
11:27:26 AM 13 are drawing there is internal subjects
11:27:32 AM 14 typically meaning PMI employees versus
11:27:35 AM 15 in this instance at INBIFO subjects
11:27:35 AM 16 that you solicited for in one or
11:27:39 AM 17 another through notice and brought in;
11:27:41 AM 18 correct?

11:27:41 AM 19 A. Correct.

11:27:42 AM 20 Q. Have you ever solicited or
11:27:44 AM 21 brought in external subjects in the
11:27:48 AM 22 U.S.?

11:27:49 AM 23 A. No.

11:27:50 AM 24 Q. Why is that?

11:27:52 AM 25 A. The laws are different here

11:27:55 AM 1 and there. We were allowed in the
11:27:57 AM 2 United States to use employees as
11:28:00 AM 3 subjects. There was no problem with
11:28:01 AM 4 that. We could not do that in Germany.

11:28:07 AM 5 Q. But you could go outside and
11:28:09 AM 6 solicit for external subjects, human
11:28:14 AM 7 subjects, for these studies and
11:28:19 AM 8 experiments in Germany, correct?

11:28:20 AM 9 A. Yes.

11:28:31 AM 10 Q. Now, Dr. Jarred Cobal is a
11:28:36 AM 11 researcher in Germany, correct?

11:28:36 AM 12 A. Jarred Cobal, right.

11:28:44 AM 13 Q. Was he associated with INBIFO?

11:28:44 AM 14 A. He has done some studies for
11:28:49 AM 15 INBIFO, yes.

11:28:49 AM 16 Q. Was he involved in those
11:28:54 AM 17 studies with you?

11:28:55 AM 18 A. No.

11:28:56 AM 19 Q. Do you consider him to be one
11:28:58 AM 20 of the premier researchers in the field
11:29:01 AM 21 of evoke potentials?

11:29:04 AM 22 A. He certainly is, yes.

11:29:06 AM 23 Q. Is that why you went to
11:29:06 AM 24 Germany in the first place, to be close
11:29:08 AM 25 to him or work with him?

11:29:08 AM 1 A. In part, yes.

11:29:11 AM 2 Q. What was the other reason?

11:29:13 AM 3 A. Well, there were a number of
11:29:13 AM 4 reasons why I was sent to Germany.

11:29:24 AM 5 Q. Can you tell the Jury what
11:29:24 AM 6 those are?

11:29:24 AM 7 A. Well, one was certainly to
11:29:24 AM 8 have a closer association with Dr.
11:29:24 AM 9 Cobal. Another was, we had methods of
11:29:26 AM 10 getting -- in Germany -- of going to
11:29:29 AM 11 get our studies ethically reviewed
11:29:29 AM 12 because the studies were done according
11:29:33 AM 13 to good clinical practices, which
11:29:34 AM 14 involve a lot of people work and a lot
11:29:38 AM 15 of review from external people and
11:29:41 AM 16 auditors and all of this kind of stuff,
11:29:44 AM 17 so we wanted to get it, and we went to
11:29:48 AM 18 the Friberg Commission, which is like
11:29:50 AM 19 the FDA, to get approval for it and all
11:29:52 AM 20 of that.

11:29:53 AM 21 Another reason was, they had
11:29:56 AM 22 physicians on staff at INBIFO so they
11:29:56 AM 23 could oversee parts of the study which
11:30:03 AM 24 might involve some medical procedure.

11:30:03 AM 25 The fourth reason and very

11:30:05 AM 1 important reason was they were reducing
11:30:07 AM 2 head count at Philip Morris USA. They
11:30:10 AM 3 wanted to keep my services but since
11:30:16 AM 4 they were reducing head count, putting
11:30:19 AM 5 me in International was like
11:30:24 AM 6 effectively reducing USA head count.

11:30:29 AM 7 Q. Now INBIFO is owned by Philip
11:30:33 AM 8 Morris, correct?

11:30:34 AM 9 A. That's correct.

11:30:34 AM 10 Q. Lock, stock and barrel; right?

11:30:39 AM 11 A. That's correct.

11:30:42 AM 12 Q. Now, what years were you
11:30:44 AM 13 working at INBIFO?

11:30:47 AM 14 A. I worked there from October
11:30:51 AM 15 '92 to December '95.

11:31:03 AM 16 Q. How is your German?

11:31:06 AM 17 A. Not bad.

11:31:06 AM 18 MR. HOPPER: (Speaking in
11:31:06 AM 19 German.)

11:31:26 AM 20 BY MR. HOPPER:

11:31:26 AM 21 Q. Now, in these EEG and PREP
11:31:29 AM 22 studies that you were doing at INBIFO,
11:31:32 AM 23 what was the purposes of those studies?

11:31:36 AM 24 A. There were a number of
11:31:37 AM 25 purposes. One was to see with these

11:31:41 AM 1 cigarettes where the nicotine was
11:31:44 AM 2 naturally occurring rather than sprayed
11:31:47 AM 3 on whether we could replicate the
11:31:51 AM 4 effects we had had with a previous
11:31:54 AM 5 study that we did in the States.

11:31:55 AM 6 Another purpose of the study
11:31:57 AM 7 was to get our feet wet with the good
11:32:00 AM 8 clinical practices for nontherapeutic
11:32:03 AM 9 study in humans because nobody at
11:32:04 AM 10 INBIFO had ever done human studies. I
11:32:11 AM 11 guess those were the two principal
11:32:44 AM 12 reasons.

11:32:47 AM 13 Q. Were there any other reasons
11:32:48 AM 14 that you would tell the Jury that you
11:32:51 AM 15 were conducting those type of studies?

11:32:55 AM 16 A. Well, just to evaluate the
11:32:57 AM 17 effects of nicotine on the PREP and on
11:33:02 AM 18 subjects in a manner where everything
11:33:06 AM 19 else was controlled for.

11:33:17 AM 20 Q. Did the work involve smoking?

11:33:21 AM 21 A. Yes.

11:33:22 AM 22 Q. You had human subjects who
11:33:25 AM 23 smoked, correct?

11:33:29 AM 24 A. That's correct.

11:33:31 AM 25 Q. Did you deliver any olfactory

11:33:34 AM 1 stimuli?

11:33:36 AM 2 A. Not as part of this study.

11:33:39 AM 3 Q. As a part of any other study?

11:33:42 AM 4 A. Yes. We have done work with

11:33:45 AM 5 olfactory stimuli

11:33:48 AM 6 Q. While you were at INBIFO?

11:33:50 AM 7 A. No, not at INBIFO.

11:34:02 AM 8 Q. Doctor, I'm going to show you

11:34:05 AM 9 testimony that you provided in the

11:34:07 AM 10 Small or Beanie, I have it, Forcina,

11:34:14 AM 11 maybe yet another deposition where you

11:34:16 AM 12 stated on Page 39, lines 15 through

11:34:22 AM 13 let's say 21 -- I'm going to read it

11:34:29 AM 14 and then I'm going to have you look at

11:34:29 AM 15 it to be sure.

11:34:34 AM 16 Ms. Broctel questioned you and

11:34:34 AM 17 she said, "Did that work concern

11:34:37 AM 18 determining response? Human

11:34:37 AM 19 physiological response to smoking by

11:34:40 AM 20 examining olfactory delivered stimuli?"

11:34:44 AM 21 Answer from Dr. Gullotta,

11:34:44 AM 22 "That work did not involve smoking at

11:34:44 AM 23 all."

11:34:48 AM 24 Question, at line 19. "Okay.

11:34:51 AM 25 Did it have anything to do with

11:34:53 AM 1 nicotine?"

11:34:54 AM 2 At line 21, "No, it did not."

11:34:58 AM 3 Now, you just testified and

11:35:01 AM 4 told me that you were working on

11:35:04 AM 5 nicotine, that you used smokers, that

11:35:04 AM 6 you were testing smokers.

11:35:04 AM 7 Can you tell me why at Page 39

11:35:08 AM 8 there --

11:35:09 AM 9 A. I don't know what she is

11:35:11 AM 10 talking about.

11:35:12 AM 11 Q. -- that you would have

11:35:13 AM 12 testified at that point that you didn't

11:35:15 AM 13 use smokers and you weren't measuring

11:35:20 AM 14 for nicotine?

11:35:22 AM 15 A. Which lines are you referring

11:35:23 AM 16 to.

11:35:25 AM 17 Q. Page 39 and line 15 through 21

11:35:33 AM 18 or so.

11:35:33 AM 19 A. I don't know which work

11:35:33 AM 20 she's --

11:35:34 AM 21 MR. GAY:

11:35:34 AM 22 Could we see Page 37?

11:35:42 AM 23 MR. HOPPER: Sure. (Tendering

11:35:54 AM 24 document.)

11:35:55 AM 25 A. I was speaking about the Cobal

11:35:58 AM 1 work. None of his -- that didn't
11:36:09 AM 2 involve -- we were referring to the
11:36:10 AM 3 work of Jarred Cobal and that did not
11:36:16 AM 4 involve smoking, that involved
11:36:19 AM 5 olfactory stimuli.

11:36:41 AM 6 Q. So, that's the difference
11:36:41 AM 7 between what you're describing to the
11:36:41 AM 8 jury today and how you testified at
11:36:45 AM 9 that time in this other case?

11:36:45 AM 10 A. That's right.

11:36:46 AM 11 Q. Thank you, Doctor.

11:36:51 AM 12 So, Cobal's work did not
11:36:54 AM 13 involve the work on pattern reversal
11:36:59 AM 14 EGs with nicotine, correct.

11:37:03 AM 15 MR. GAY: Object to the form.

11:37:03 AM 16 You can answer.

11:37:03 AM 17 A. At the time, no.

11:37:06 AM 18 Q. Yours did, however?

11:37:07 AM 19 A. Yes.

11:37:09 AM 20 Q. At the time, no, but later it
11:37:13 AM 21 did, when he worked with you?

11:37:16 AM 22 A. He's doing a study right now
11:37:20 AM 23 that involves some work with pattern
11:37:24 AM 24 reversal evoke potential.

11:38:11 AM 25 Q. Okay. Doctor, why were you

11:38:14 AM 1 testing the varying levels or effects
11:38:17 AM 2 of nicotine through the EEG process on
11:38:22 AM 3 smokers.

11:38:24 AM 4 MR. GAY: Object to the form.

11:38:25 AM 5 A. Are you speaking about the
11:38:27 AM 6 pattern reversal work?

11:38:31 AM 7 Q. Yes?

11:38:31 AM 8 A. Everybody -- would you ask the
11:38:33 AM 9 question again?

11:38:33 AM 10 MR. HOPPER: Why don't we have
11:39:10 AM 11 Madam Court Reporter read it back.

11:39:10 AM 12 (The question was read back.)

11:39:11 AM 13 A. I should say -- I've got to
11:39:12 AM 14 remind you, it was the effects of
11:39:13 AM 15 nicotine as delivered in cigarette
11:39:15 AM 16 smoke.

11:39:15 AM 17 Q. I'm sorry, Doctor. I missed
11:39:21 AM 18 your answer.

11:39:21 AM 19 A. It was nicotine as delivered
11:39:22 AM 20 in cigarette smoke, to be more precise,
11:39:24 AM 21 and every good scientist wants to know
11:39:27 AM 22 the shape of the function relating what
11:39:29 AM 23 he's testing to the magnitude of the
11:39:31 AM 24 effect he gets, so I was developing a
11:39:37 AM 25 dose response curve.

11:39:54 AM 1 Q. Do you agree with Dr. Dunn --

11:39:58 AM 2 you know who Dr. Dunn is, you worked

11:40:03 AM 3 for him at one time, didn't you?

11:40:03 AM 4 A. William Dunn?

11:40:06 AM 5 Q. Yes.

11:40:06 AM 6 A. Yes.

11:40:06 AM 7 Q. Do you agree with Dr. Dunn

11:40:07 AM 8 that the primary reason people smoke is

11:40:07 AM 9 for nicotine?

11:40:07 AM 10 MR. GAY: Object to the form.

11:40:13 AM 11 A. No.

11:40:13 AM 12 BY MR. HOPPER:

11:40:13 AM 13 Q. What is the primary reason

11:40:15 AM 14 that people smoke, in your view?

11:40:19 AM 15 A. Well, nicotine is certainly

11:40:20 AM 16 important but not just nicotine

11:40:24 AM 17 pharmacology, nicotine has a flavor and

11:40:28 AM 18 that is very important. There's also

11:40:28 AM 19 other factors that -- there are a lot

11:40:35 AM 20 of queues that become conditioned to

11:40:35 AM 21 cigarette smoke. So, you might light a

11:40:38 AM 22 cigarette every time you pick up the

11:40:40 AM 23 telephone. So, there are social

11:40:42 AM 24 factors.

11:40:44 AM 25 Of course, taste and smell,

11:40:46 AM 1 all kind of factors like that.

11:40:56 AM 2 Individual factors.

11:40:56 AM 3 Q. I don't agree or disagree with
11:40:56 AM 4 you, but, in fact, those are secondary
11:40:59 AM 5 tertiary reasons that people smoke.

11:41:00 AM 6 Isn't the primary reason people smoke
11:41:02 AM 7 is to get a daily dose of nicotine, in
11:41:08 AM 8 the words of Dr. Dunn?

11:41:10 AM 9 MR. GAY: Object to the form.

11:41:10 AM 10 A. Dr. Dunn, I don't think, could
11:41:10 AM 11 possibly know that. I mean, since Dr.
11:41:10 AM 12 Dunn's time, we've made so much more in
11:41:10 AM 13 understanding what goes on when people
11:41:14 AM 14 smoke than you can imagine. I don't
11:41:18 AM 15 think at the time they even realized
11:41:20 AM 16 that nicotine had flavor properties.

11:41:20 AM 17 Q. Well, let's put it in a
11:41:25 AM 18 different context then.

11:41:25 AM 19 You know who Harold Burnley
11:41:25 AM 20 is?

11:41:29 AM 21 A. Vaguely.

11:41:29 AM 22 Q. Do you know who Dr. Cliff
11:41:31 AM 23 Lilly is?

11:41:32 AM 24 A. Yes.

11:41:33 AM 25 Q. Those colleagues of yours have

11:41:35 AM 1 testified in depositions in this case
11:41:38 AM 2 that the primary reason people smoke is
11:41:41 AM 3 to obtain nicotine. Okay?

11:41:45 AM 4 A. Uh-huh.

11:41:46 AM 5 Q. Now, you developed a product
11:41:49 AM 6 at Philip Morris, perhaps not you
11:41:49 AM 7 personally, but your company developed
11:41:51 AM 8 a product that was called Next,
11:41:53 AM 9 correct?

11:41:54 AM 10 A. That's correct.

11:41:55 AM 11 Q. Are you familiar with that
11:41:56 AM 12 product?

11:41:59 AM 13 MR. GAY: Let me just note an
11:41:59 AM 14 objection to the form. I don't
11:41:59 AM 15 even think there's a question.
11:41:59 AM 16 It's only statements being made by
11:42:06 AM 17 counsel. Object to the form of
11:42:06 AM 18 this. You can continue.

11:42:08 AM 19 MR. HOPPER: Sure. It's
11:42:11 AM 20 coming though.

21 MR. GAY: It may. But you're
22 stopping --

23 MR. HOPPER: I'm trying to be
24 sure he's familiar with what it is
25 I'm talking about, so he has some

1 context.

2 MR. GAY: I'm just objecting to
3 the form.

4 MR. HOPPER: Sure.

5 BY MR. HOPPER:

11:42:18 AM 6 Q. You are familiar with the Next
11:42:20 AM 7 product?

11:42:21 AM 8 A. That's correct.

11:42:22 AM 9 Q. And Next was a denicotinized
11:42:26 AM 10 cigarette, correct?

11:42:26 AM 11 A. Yes.

11:42:27 AM 12 Q. And that was test-marketed by
11:42:29 AM 13 Philip Morris, correct?

11:42:30 AM 14 A. Yes.

11:42:31 AM 15 Q. It was never developed and
11:42:33 AM 16 reached as a fully viable marketed
11:42:37 AM 17 product by Philip Morris, correct.

11:42:40 AM 18 MR. GAY: Object to the form.

11:42:41 AM 19 A. As far as I know, it was only
11:42:42 AM 20 in test-market.

11:42:42 AM 21 BY MR. HOPPER:

11:42:44 AM 22 Q. And the reason that failed is
11:42:46 AM 23 because it didn't have nicotine,
11:42:46 AM 24 correct?

11:42:49 AM 25 MR. GAY: Object to the form.

11:42:50 AM 1 A. My understanding was it failed
11:42:52 AM 2 because it tasted bad.

11:42:52 AM 3 BY MR. HOPPER:

11:42:55 AM 4 Q. You think, and it's your
11:42:58 AM 5 testimony to the Jury today, that the
11:43:01 AM 6 reason Next failed is because people
11:43:04 AM 7 didn't get their daily taste of
11:43:07 AM 8 nicotine?

11:43:07 AM 9 MR. GAY: Object to the form.

11:43:08 AM 10 A. No, that is not what I said.

11:43:08 AM 11 BY MR. HOPPER:

11:43:10 AM 12 Q. What did you say?

11:43:11 AM 13 A. I said that Next tasted bad.

11:43:13 AM 14 Q. So, you don't believe that the
11:43:15 AM 15 primary reason that people smoke is to
11:43:16 AM 16 obtain their daily dose of nicotine?

11:43:16 AM 17 MR. GAY: Object. Asked and
11:43:16 AM 18 answered.

11:43:16 AM 19 A. I think that is yet to be
11:43:18 AM 20 determined.

11:43:18 AM 21 BY MR. HOPPER:

11:43:43 AM 22 Q. Dr. Gullotta, what are you
11:43:48 AM 23 doing to determine an answer to that
11:43:51 AM 24 question that you said it's
11:43:53 AM 25 undetermined.

1 Dr. Dunn --

2 MR. GAY: It's Dr. Gullotta.

3 MR. HOPPER: I apologize.

4 MR. GAY: I understand.

5 MR. HOPPER: Too many doctors.

6 BY MR. HOPPER:

7 Q. Dr. Gullotta, what are you
8 going to determine an answer to that
9 question that you said it's
10 undetermined?

11:43:55 AM 11 A. One is -- I've not personally

11:43:59 AM 12 done it but they have looked

11:44:01 AM 13 extensively, the flavor people have

11:44:05 AM 14 looked to try to find a sensory

11:44:09 AM 15 replacement for nicotine and to my

11:44:11 AM 16 knowledge, they haven't found it.

11:44:16 AM 17 Q. So, it's your testimony to the

11:44:17 AM 18 jury today that people smoke to obtain

11:44:21 AM 19 the taste of nicotine?

11:44:23 AM 20 MR. GAY: Object to the form.

11:44:24 AM 21 A. That is certainly one of the

11:44:26 AM 22 factors.

11:44:27 AM 23 Q. Is it the primary factor?

11:44:29 AM 24 A. I don't know.

11:44:44 AM 25 Q. It's your testimony today that

11:44:46 AM 1 the purpose of nicotine in cigarettes
11:44:48 AM 2 is flavor?

11:44:48 AM 3 MR. GAY: Object to the form.

11:44:51 AM 4 A. The role of nicotine in
11:44:53 AM 5 tobacco smoke is extremely complex. In
11:44:58 AM 6 addition to having pharmacologic
11:45:00 AM 7 properties, it does all kinds of
11:45:02 AM 8 things, and to say that people smoke
11:45:04 AM 9 for nicotine, is, I think, is extremely
11:45:08 AM 10 simplistic.

11:45:10 AM 11 Q. Is nicotine addictive?

11:45:10 AM 12 MR. GAY: Object to the form.
11:45:14 AM 13 Foundation

11:45:15 AM 14 MR. HOPPER: Well, he referred
11:45:19 AM 15 to it as pharmacological effects
11:45:23 AM 16 and sensory, so he opened the door.
11:45:23 AM 17 So, I think I can question him on
11:45:27 AM 18 it legitimately.

11:45:27 AM 19 MR. GAY: I didn't say he
11:45:28 AM 20 couldn't answer.

11:45:29 AM 21 A. I have extreme difficulty with
11:45:31 AM 22 the concepts of addiction.

11:45:31 AM 23 BY MR. HOPPER:

11:45:33 AM 24 Q. It creates substance
11:45:36 AM 25 dependence on the part of users?

11:45:41 AM 1 A. I have a problem with the
11:45:42 AM 2 concept of dependence as well.
11:45:46 AM 3 Q. What do you think the
11:45:47 AM 4 pharmacological impact of nicotine is?
11:45:47 AM 5 MR. GAY: Object to the form.
11:45:51 AM 6 A. I'm not sure I understand your
11:45:54 AM 7 question.
11:45:54 AM 8 BY MR. HOPPER:
11:45:54 AM 9 Q. You referred to nicotine as
11:45:57 AM 10 having a pharmacological effect,
11:45:59 AM 11 correct, in testimony a moment ago to
11:46:00 AM 12 the Jury?
11:46:01 AM 13 A. Yes.
11:46:02 AM 14 Q. What do you mean by that?
11:46:03 AM 15 A. In experimental animals, you
11:46:06 AM 16 can look at the release of all kinds of
11:46:06 AM 17 neurotransmitters in response to
11:46:08 AM 18 nicotine. What of that is relevant to
11:46:10 AM 19 human smoking, I have absolutely no
11:46:10 AM 20 idea.
11:46:12 AM 21 Q. You have tested human smokers,
11:46:14 AM 22 haven't you?
11:46:15 AM 23 A. Yes. But I have not measured
11:46:15 AM 24 pharmacology.
11:46:18 AM 25 Q. You have measured nicotine?

11:46:18 AM 1 MR. GAY: Object to the form.

11:46:21 AM 2 A. I measured nicotine in

11:46:23 AM 3 tobacco.

11:46:23 AM 4 BY MR. HOPPER:

11:46:23 AM 5 Q. Correct.

11:46:23 AM 6 A. I have not measured nicotine

11:46:25 AM 7 in humans.

11:46:27 AM 8 Q. You have measured nicotine in

11:46:30 AM 9 smokers, correct?

11:46:30 AM 10 MR. GAY: Objection.

11:46:31 AM 11 A. No.

11:46:31 AM 12 Q. You have had human smokers as

11:46:33 AM 13 subject where you have used the PREP

11:46:35 AM 14 study and measured nicotine, correct?

11:46:39 AM 15 A. No.

11:46:39 AM 16 MR. GAY: Objection. You're

11:46:43 AM 17 misstating the testimony of the

11:46:43 AM 18 witness, Counsel.

11:46:43 AM 19 MR. HOPPER: Let's let him

11:46:43 AM 20 answer and see how he clarifies it

11:46:44 AM 21 then.

11:46:44 AM 22 MR. GAY: He said no. You're

11:46:44 AM 23 just misstating things on the

11:46:49 AM 24 record, and that's my objection.

11:46:49 AM 25 BY MR. HOPPER:

Produced by RAREC
HUMPHREY

11:46:49 AM 1 Q. You have utilized human
11:46:53 AM 2 smokers as subjects; correct?
11:46:55 AM 3 A. Correct.
11:46:56 AM 4 Q. At INBIFO?
11:46:58 AM 5 A. That is correct.
11:46:58 AM 6 Q. And you have told the Jury
11:47:00 AM 7 that you did PREP studies, or the
11:47:00 AM 8 pattern reversal EEGs?
11:47:02 AM 9 A. That's correct.
11:47:02 AM 10 Q. And you were measuring
11:47:04 AM 11 nicotine, correct?
11:47:04 AM 12 MR. GAY: Objection.
11:47:05 AM 13 A. Not correct.
11:47:07 AM 14 Q. What were you doing?
11:47:08 AM 15 A. I was measuring the effects of
11:47:11 AM 16 nicotine on the pattern reversal evoke
11:47:13 AM 17 potential but I was not measuring
11:47:15 AM 18 nicotine.
11:47:15 AM 19 Q. What is the difference?
11:47:18 AM 20 That's what I meant, what is the
11:47:21 AM 21 difference?
11:47:21 AM 22 A. The difference is, I'm
11:47:21 AM 23 measuring one of the effects of
11:47:23 AM 24 nicotine on the pattern reversal evoke
11:47:26 AM 25 potential. I was not measuring

11:47:29 AM 1 nicotine levels in the body.

11:47:29 AM 2 Q. Fair enough. I'm sorry if I
11:47:32 AM 3 misled you.

11:47:32 AM 4 I was referring to the
11:47:34 AM 5 statement that you made that you, what
11:47:36 AM 6 you were measuring, the effects of
11:47:39 AM 7 nicotine, and that includes a
11:47:41 AM 8 pharmacological effect, correct?

11:47:43 AM 9 A. I'm not measuring
11:47:45 AM 10 pharmacology, I'm measuring
11:47:48 AM 11 electrophysiology.

11:47:49 AM 12 Q. But the electrophysiology
11:47:49 AM 13 would take up the fact that nicotine
11:47:49 AM 14 responds to a nicotinic receptor in the
11:47:51 AM 15 brain, correct?

11:47:51 AM 16 A. Presumably.

11:47:52 AM 17 Q. And neurotransmitters are
11:47:54 AM 18 emitted, correct?

11:47:56 AM 19 A. Presumably.

11:47:57 AM 20 Q. Doesn't that show up on an
11:47:59 AM 21 EEG?

11:48:01 AM 22 A. No.

11:48:01 AM 23 Q. Why not?

11:48:01 AM 24 A. All you are measuring is the
11:48:03 AM 25 electrical response recorded from the

11:48:06 AM 1 scalp. You have no idea what's going
11:48:07 AM 2 on under there electrochemically or as
11:48:09 AM 3 far as neurotransmitters or anything.
11:48:11 AM 4 Q. Are you aware that others have
11:48:13 AM 5 studied the pharmacological effects of
11:48:16 AM 6 nicotine?
11:48:17 AM 7 A. Yes.
11:48:18 AM 8 Q. You, yourself, are not a
11:48:20 AM 9 neurochemist, are you?
11:48:23 AM 10 A. No.
11:48:23 AM 11 Q. You said you have had
11:48:25 AM 12 training, when we referred to your C.V.
11:48:28 AM 13 earlier in neuroanatomy and
11:48:31 AM 14 neurophysiology, correct?
11:48:31 AM 15 A. Correct.
11:48:34 AM 16 Q. But you haven't studied or you
11:48:34 AM 17 don't distinguish yourself as a
11:48:34 AM 18 neurochemist, correct?
11:48:38 AM 19 A. No, I do not.
11:48:41 AM 20 Q. Is that why you say you don't
11:48:51 AM 21 know that nicotine has a
11:48:51 AM 22 pharmacological effect that creates
11:48:51 AM 23 addiction?
11:48:51 AM 24 MR. GAY: Object to the form.
11:48:51 AM 25 A. Well, first of all, I have a

11:48:56 AM 1 big problem with the use of the term
11:48:56 AM 2 addiction.

11:48:56 AM 3 Q. Okay. So, you don't like that
11:48:58 AM 4 English word but you also are saying
11:49:00 AM 5 that because you're not a neurochemist,
11:49:04 AM 6 you can't testify to the pharmacologic
11:49:08 AM 7 effects of nicotine?

11:49:08 AM 8 A. No, that's not what I said at
11:49:10 AM 9 all. I said I had a problem with that
11:49:12 AM 10 concept.

11:49:13 AM 11 Q. Can you testify about the
11:49:14 AM 12 pharmacological effects of nicotine?

11:49:17 AM 13 A. I know some work in
11:49:19 AM 14 experimental animals. I can talk about
11:49:22 AM 15 that.

11:49:23 AM 16 Q. But not as a neurochemist?

11:49:26 AM 17 A. No.

11:49:34 AM 18 Q. Now, you can make a
11:49:38 AM 19 determination through the use of EEGs
11:49:41 AM 20 to characterize odor and some flavors
11:49:45 AM 21 that are volatiles, correct?

11:49:46 AM 22 A. That's correct.

11:49:46 AM 23 Q. And you have done that work?

11:49:48 AM 24 A. I have.

11:49:48 AM 25 Q. And you have done it at

11:49:50 AM 1 INBIFO?

11:49:52 AM 2 A. No. I did very little

11:49:54 AM 3 olfactory work at INBIFO.

11:49:57 AM 4 Q. Mostly flavorants then?

11:50:00 AM 5 A. Very little with flavorants.

11:50:00 AM 6 Mainly PREPS.

11:50:04 AM 7 Q. But you have done that work

11:50:05 AM 8 here then?

11:50:06 AM 9 A. Most of it was here, yes.

11:50:09 AM 10 Q. Are you familiar with a text

11:50:11 AM 11 called Human Senses 2nd Edition by

11:50:16 AM 12 Frank Gilliard?

11:50:16 AM 13 A. Hillard?

11:50:19 AM 14 Q. Yes. Excuse me.

11:50:19 AM 15 A. Yeah, I think I am.

11:50:21 AM 16 Q. Published in 1972?

11:50:23 AM 17 A. I think I am.

11:50:24 AM 18 Q. You own that book in your

11:50:28 AM 19 library, don't you?

11:50:29 AM 20 A. Probably.

11:50:31 AM 21 Q. Is it true that various

11:50:33 AM 22 flavorants and odorants have different

11:50:38 AM 23 responses through the use of the EEG?

11:50:43 AM 24 A. I'm not sure I understand your

11:50:45 AM 25 question.

11:50:46 AM 1 Q. Do you get a different
11:50:46 AM 2 characteristic or a different reading
11:50:47 AM 3 with the brain wave as between
11:50:50 AM 4 different flavors and different
11:50:52 AM 5 odorants?

11:50:57 AM 6 A. In a general sense you do,
11:50:59 AM 7 yes.

11:51:00 AM 8 Q. And you can measure flavor
11:51:02 AM 9 with the EEG?

11:51:04 AM 10 A. We can measure latency and
11:51:08 AM 11 amplitude to an applied odorant, yeah.

11:51:08 AM 12 Q. Okay. As you testified
11:51:09 AM 13 earlier, that is what the EEG does,
11:51:13 AM 14 measures the amplitude and latency?

11:51:16 AM 15 A. Right.

11:51:17 AM 16 Q. And you get varying amplitudes
11:51:17 AM 17 and latency effects from different
11:51:17 AM 18 flavors and different odorants,
11:51:20 AM 19 correct?

11:51:20 AM 20 A. Right. And different
11:51:21 AM 21 intensities from the same odor.

11:51:33 AM 22 Q. Well, Doctor, you have
11:51:36 AM 23 testified that you believe nicotine is
11:51:39 AM 24 a flavorant in cigarettes, correct?

11:51:41 AM 25 A. Yes.

11:51:41 AM 1 Q. And you have just testified
11:51:43 AM 2 that you can measure through the EEG
11:51:46 AM 3 flavor, correct?

11:51:47 AM 4 A. That's correct.

11:51:48 AM 5 Q. So therefore, isn't the logic
11:51:50 AM 6 that you can also measure nicotine by
11:51:52 AM 7 the EEG?

11:51:52 AM 8 MR. GAY: Object to the form.

11:51:55 AM 9 A. Absolutely.

11:51:55 AM 10 BY MR. HOPPER:

11:52:07 AM 11 Q. You studied neuroanatomy,
11:52:10 AM 12 correct?

11:52:10 AM 13 A. Yes.

11:52:11 AM 14 Q. And there are no flavor or
11:52:13 AM 15 taste receptors in the lungs, correct?

11:52:16 AM 16 A. That's correct.

11:52:17 AM 17 Q. And smoke is actually inhaled
11:52:19 AM 18 into the lungs, correct?

11:52:21 AM 19 A. It has to go through
11:52:24 AM 20 someplace, though.

11:52:24 AM 21 Q. But it goes through the lungs,
11:52:27 AM 22 correct?

11:52:27 AM 23 A. It eventually winds up there
11:52:28 AM 24 but it goes through the mouth and
11:52:28 AM 25 through the upper respiratory airways,

11:52:29 AM 1 some of it goes up your nose.

11:52:29 AM 2 Q. I don't think anybody would

11:52:32 AM 3 argue with you on that, but that wasn't

11:52:33 AM 4 the question. The question is, is that

11:52:36 AM 5 smoke is actually inhaled into the

11:52:38 AM 6 lungs, correct?

11:52:39 AM 7 A. If people inhale it, it is.

11:52:43 AM 8 Q. Okay. How would you define

11:52:51 AM 9 sensory impact, Doctor?

11:52:53 AM 10 A. Impact?

11:52:55 AM 11 Q. Yes.

11:52:55 AM 12 A. Can we just say impact rather

11:52:58 AM 13 than sensory impact?

11:53:00 AM 14 Q. Well, we will start with

11:53:01 AM 15 impact then if it's more suitable to

11:53:04 AM 16 you.

11:53:04 AM 17 A. Yeah, impact is a sensation

11:53:06 AM 18 felt in the back of the throat upon

11:53:09 AM 19 inhalation of cigarette smoke

11:53:11 AM 20 containing nicotine.

11:53:13 AM 21 Q. And then what is sensory

11:53:15 AM 22 impact?

11:53:16 AM 23 A. I have no idea.

11:53:17 AM 24 Q. You have never heard the use

11:53:20 AM 25 of that term?

11:53:21 AM 1 A. I have probably heard the use
11:53:24 AM 2 but I don't understand it, because in
11:53:29 AM 3 my thinking impact in terms of tobacco
11:53:30 AM 4 is sensory.
11:53:32 AM 5 Q. You are familiar with the POLs
11:53:35 AM 6 at Philip Morris, correct?
11:53:37 AM 7 A. Somewhat.
11:53:38 AM 8 Q. For the Jury, POL stands for
11:53:41 AM 9 the public opinion laboratories,
11:53:43 AM 10 correct?
11:53:43 AM 11 A. That's my understanding, yes.
11:53:44 AM 12 Q. Right?
11:53:44 AM 13 A. Um-hum.
11:53:45 AM 14 Q. Are you familiar with the POLs
11:53:50 AM 15 or the public opinion laboratories that
11:53:54 AM 16 have defined sensory impact?
11:53:56 AM 17 A. No.
11:53:58 AM 18 Q. You have never seen the
11:53:59 AM 19 questionnaires that your company
11:54:00 AM 20 produces to the subjects in those POLs
11:54:00 AM 21 asking them to define sensory impact?
11:54:04 AM 22 A. No.
11:54:04 AM 23 Q. Are you aware that they have
11:54:06 AM 24 defined the feeling you get when you
11:54:09 AM 25 deeply inhale into your lungs as a

11:54:13 AM 1 sensory impact?

11:54:14 AM 2 A. I have not seen that ballot.

11:54:16 AM 3 Q. You have never heard that

11:54:18 AM 4 referred to in that way?

11:54:20 AM 5 A. No.

11:54:21 AM 6 Q. Who would know about the POLs

11:54:23 AM 7 in those questionnaires at your

11:54:26 AM 8 company?

11:54:27 AM 9 A. I would imagine that would be

11:54:28 AM 10 the people in the Product Evaluation

11:54:28 AM 11 Division who do those kinds of POLs.

11:54:28 AM 12 Q. All right. And do you have a

11:54:29 AM 13 name of a person who heads that?

11:54:31 AM 14 A. Melissa Gelton.

11:54:34 AM 15 Q. Have you ever collaborated

11:54:36 AM 16 with her on your studies?

11:54:40 AM 17 A. On POLs?

11:54:40 AM 18 Q. Yes.

11:54:41 AM 19 A. No.

11:54:41 AM 20 Q. On flavorant testing or

11:54:44 AM 21 odorant testing?

11:54:47 AM 22 A. No. Oh, yes, on one study we

11:54:51 AM 23 collaborated.

11:54:54 AM 24 Q. Or with anybody else in the

11:54:57 AM 25 POLs or the Product Evaluation

11:54:59 AM 1 Department.

11:55:00 AM 2 MR. GAY: Object to the form.

11:55:01 AM 3 Q. Have you ever collaborated?

11:55:01 AM 4 Same question.

11:55:04 AM 5 A. On one study, I collaborated

11:55:08 AM 6 with Melissa Gelton, and that's all I

11:55:12 AM 7 can remember.

11:55:14 AM 8 Q. Okay. No one else then?

11:55:14 AM 9 A. I don't think so.

11:55:14 AM 10 Q. Okay.

11:55:16 AM 11 A. Not while they were members of

11:55:16 AM 12 Produce Evaluation.

11:55:16 AM 13 Q. How do you determine from the

11:55:16 AM 14 EEG where impact is coming from?

11:55:25 AM 15 A. That is an interesting

11:55:28 AM 16 question. Remember, I told you, you

11:55:33 AM 17 measure latency and amplitude?

11:55:33 AM 18 Q. Right.

11:55:37 AM 19 A. There is a component in

11:55:40 AM 20 amplitude called the P1-N2, which we

11:55:46 AM 21 believe reflects impact.

11:55:52 AM 22 Q.. P1?

11:55:59 AM 23 A. N2.

11:55:59 AM 24 Q. N as in nitrogen?

11:56:03 AM 25 A. Yeah.

11:56:03 AM 1 Q. Not that that's what it
11:56:03 AM 2 means --
3 A. Right.
4 Q. -- but I'm using it to be
5 sure we have the correct letter.
6 N2?
7 A. Yeah.
8 Q. Go ahead.
11:56:04 AM 9 A. That component seems to get
11:56:06 AM 10 bigger as nicotine delivery is
11:56:09 AM 11 increased and is correlated with impact
11:56:13 AM 12 scores.
11:56:14 AM 13 Q. When you say it gets bigger,
11:56:17 AM 14 you mean it increases?
11:56:20 AM 15 A. Yes. Peak to peak amplitude
11:56:26 AM 16 increases.
11:56:37 AM 17 Q. As you increase the level of
11:56:37 AM 18 nicotine?
11:56:37 AM 19 A. Yes. But I should explain
11:56:37 AM 20 something to you.
11:56:37 AM 21 Why we think it has to do with
11:56:37 AM 22 the sensation of impact rather than
11:56:37 AM 23 nicotine is because we can get a change
11:56:40 AM 24 in amplitude on cigarettes without
11:56:42 AM 25 nicotine if they have menthol, and

11:56:45 AM 1 menthol provides impact like nicotine.

11:56:52 AM 2 Q. Can you tell me a little bit
11:56:54 AM 3 more about what you mean and what your
11:56:55 AM 4 studies are involving menthol versus
11:56:58 AM 5 nicotine?

11:56:59 AM 6 A. We did -- let's see about the
11:57:02 AM 7 easiest way to explain it.

11:57:05 AM 8 We had a series of cigarettes
11:57:07 AM 9 prepared. Some of them had -- were
11:57:10 AM 10 just extracted with this CO2 extraction
11:57:15 AM 11 process and nothing was done to them.

11:57:18 AM 12 Q. What do you mean nothing was
11:57:21 AM 13 done to them?

11:57:22 AM 14 A. Nothing was reapplied to them.
11:57:26 AM 15 Some of the cigarettes, we reapplied
11:57:29 AM 16 nicotine in various levels.

11:57:32 AM 17 Q. How did you do that?

11:57:34 AM 18 A. I can't recall. I think we
11:57:35 AM 19 might have sprayed it on.

11:57:35 AM 20 First of all, all the tobacco
11:57:35 AM 21 was extracted.

11:57:39 AM 22 Q. Yeah, I understand.

11:57:39 AM 23 A. And then we sprayed it on
11:57:39 AM 24 various levels to make the nicotine
11:57:42 AM 25 delivery levels.

11:57:44 AM 1 Then, we applied different
11:57:47 AM 2 levels of menthol on these same
11:57:50 AM 3 cigarettes. We got changes in the
11:57:53 AM 4 amplitude of the P1-N2 component, if
11:57:55 AM 5 the cigarette had nicotine, if the
11:57:57 AM 6 cigarette had menthol or nicotine, or
11:58:02 AM 7 if the cigarette only had menthol.
11:58:04 AM 8 If it had nothing, there were
11:58:08 AM 9 no changes in amplitude.
11:58:08 AM 10 Q. Let's step back so we're clear
11:58:11 AM 11 in your testimony to the Jury.
11:58:11 AM 12 How do you know how much
11:58:11 AM 13 nicotine to spray on? How do you
11:58:11 AM 14 regulate that?
11:58:16 AM 15 A. Well, I don't personally do
11:58:17 AM 16 it.
11:58:17 AM 17 Q. I understand.
11:58:18 AM 18 A. I tell what nicotine delivery
11:58:20 AM 19 levels I want and they spray them.
11:58:23 AM 20 Q. "They" being who?
11:58:27 AM 21 A. Process Development
11:58:29 AM 22 Department.
11:58:30 AM 23 It depends on how many
11:58:32 AM 24 cigarettes I want. If it's just a few,
11:58:35 AM 25 one of the chemists will do it. If

11:58:38 AM 1 it's more, it will be done in a
11:58:41 AM 2 facility called the pilot plant.
11:58:44 AM 3 Q. Well, nicotine can be toxic at
11:58:47 AM 4 a certain level, can't it?
11:58:49 AM 5 A. It can.
11:58:49 AM 6 Q. In fact, it can kill you at a
11:58:49 AM 7 certain level, can't it?
11:58:50 AM 8 A. It can.
11:58:50 AM 9 Q. It is a poison, right?
11:58:51 AM 10 A. It is.
11:58:52 AM 11 Q. How do you regulate the level
11:58:55 AM 12 of nicotine that gets sprayed on?
11:58:58 AM 13 A. They do it very carefully.
11:59:01 AM 14 Q. In a general sense, yes, but
11:59:01 AM 15 do they measure it?
11:59:02 AM 16 A. Oh, yes. Absolutely.
11:59:03 AM 17 Q. And how do they measure it?
11:59:03 AM 18 A. Analytically.
11:59:04 AM 19 Q. Okay. And how is it actually
11:59:04 AM 20 contained before it's sprayed on?
11:59:08 AM 21 A. I'm not sure.
11:59:09 AM 22 Q. Is it contained in a vial, or
11:59:12 AM 23 a beaker, or a spray pump or what?
11:59:15 AM 24 A. It's contained in a suitable
11:59:22 AM 25 container from the manufacturer we buy

11:59:26 AM 1 it from.

11:59:27 AM 2 Q. Does it have a spray pump

11:59:29 AM 3 attached to it?

11:59:31 AM 4 A. Not to my knowledge.

11:59:32 AM 5 Q. Have you ever seen the

11:59:34 AM 6 container?

11:59:35 AM 7 A. I have seen containers of

11:59:37 AM 8 nicotine. It looks like a fairly

11:59:40 AM 9 standard container to me.

11:59:44 AM 10 Q. Is it premeasured, or do your

11:59:45 AM 11 chemists measure it?

11:59:45 AM 12 A. You mean for spraying on the

11:59:48 AM 13 cigarettes?

11:59:49 AM 14 Q. Yes.

11:59:49 AM 15 A. They measure it.

11:59:53 AM 16 Q. Your chemists?

11:59:53 AM 17 A. Right.

11:59:53 AM 18 Q. Would that be someone like

11:59:55 AM 19 Jeff Seeman?

11:59:57 AM 20 A. It could be.

11:59:58 AM 21 Q. That was the kind of work he

12:00:00 PM 22 did?

12:00:00 PM 23 A. Among other things.

12:00:15 PM 24 Q. So, you are able to determine

12:00:18 PM 25 varying levels of amplitude peak to

12:00:22 PM 1 peak depending on the level of nicotine
12:00:24 PM 2 in the product?

12:00:29 PM 3 A. There is a relationship
12:00:31 PM 4 between the amplitude of that component
12:00:34 PM 5 and nicotine delivery.

12:00:37 PM 6 Q. And it will vary according to
12:00:40 PM 7 whether it's nicotine, whether it's
12:00:42 PM 8 nicotine and menthol, or whether it's
12:00:46 PM 9 just menthol, correct?

12:00:47 PM 10 A. Yes.

12:00:57 PM 11 Q. Is it your testimony that you
12:01:00 PM 12 don't need to inhale a cigarette to
12:01:02 PM 13 enjoy and get nicotine impact?

12:01:02 PM 14 MR. GAY: Object to the form.

12:01:08 PM 15 A. I am not really sure I
12:01:10 PM 16 understand your question.

12:01:16 PM 17 Q. You don't need to inhale a
12:01:18 PM 18 cigarette in order to get impact?

12:01:21 PM 19 MR. GAY: Object to the form.

12:01:21 PM 20 A. Well, impact is felt in the
12:01:25 PM 21 back of the throat. I imagine there
12:01:28 PM 22 are some clever people who could find
12:01:30 PM 23 to get it to the back of their throat
12:01:35 PM 24 and exhale it but I don't know any.

12:01:35 PM 25 Q. So, it is your testimony that

12:01:35 PM 1 you don't need to inhale to have
12:01:42 PM 2 impact?
12:01:42 PM 3 A. No, that's not my point. There
12:01:43 PM 4 are people who smoke cigarettes who
12:01:43 PM 5 don't inhale but those that do inhale
12:01:49 PM 6 and the cigarette has nicotine, they
12:01:52 PM 7 get impact in the back of the throat.
12:01:55 PM 8 Q. Okay. Let me enter my
12:01:58 PM 9 objection as being nonresponsive.
12:02:00 PM 10 The question is can you have
12:02:03 PM 11 impact without inhaling?
12:02:06 PM 12 MR. GAY: Object to the form.
12:02:08 PM 13 A. No.
12:02:08 PM 14 BY MR. HOPPER:
12:02:14 PM 15 Q. And you testified there are no
12:02:17 PM 16 sensory receptors in the lungs,
12:02:20 PM 17 correct?
12:02:20 PM 18 MR. GAY: Object to the form.
12:02:21 PM 19 A. Not to my knowledge.
12:02:22 PM 20 Q. No taste receptors?
12:02:25 PM 21 A. Not to my knowledge.
12:02:30 PM 22 Q. And certainly no odorant
12:02:35 PM 23 receptors?
12:02:37 PM 24 A. Probably not.
12:03:05 PM 25 Q. And then it's your testimony

12:03:07 PM 1 today to the Jury that people smoke to
12:03:11 PM 2 obtain the flavor of nicotine on the
12:03:13 PM 3 impact, and the impact it creates on
12:03:16 PM 4 the back of the throat, correct.

12:03:18 PM 5 MR. GAY: Object to the form.

12:03:19 PM 6 A. I'm saying that it's one of
12:03:21 PM 7 the reasons why people smoke.

12:03:24 PM 8 Q. Is it the primary reason?

12:03:24 PM 9 MR. GAY: Object to the form.

12:03:26 PM 10 A. Yet to be determined.

12:03:26 PM 11 BY MR. HOPPER:

12:03:47 PM 12 Q. Are you familiar with
12:03:48 PM 13 Dr. Victor DeNoble? Do you know him?

12:03:52 PM 14 A. Yes, I did at one time.

12:03:54 PM 15 Q. Are you familiar with his
12:03:56 PM 16 research lab here in Richmond?

12:03:59 PM 17 A. When there was one, yes.

12:04:00 PM 18 Q. Do you know why your company
12:04:02 PM 19 closed his lab down?

12:04:04 PM 20 A. Only for the reasons that I
12:04:06 PM 21 read in the paper, which I really
12:04:09 PM 22 didn't understand.

12:04:10 PM 23 Q. Did you ask anyone that you
12:04:11 PM 24 worked for why it was closed down at
12:04:15 PM 25 the time?

12:04:15 PM 1 A. I don't think so.

12:04:16 PM 2 Q. Do you know that that research

12:04:17 PM 3 was sent off to INBIFO?

12:04:20 PM 4 A. That research, to my

12:04:21 PM 5 knowledge, was discontinued, it was not

12:04:25 PM 6 sent off.

12:04:26 PM 7 Q. You don't know that it was

12:04:28 PM 8 sent off to INBIFO? You can't

12:04:31 PM 9 testified today whether it was or

12:04:33 PM 10 wasn't?

12:04:34 PM 11 A. I don't think it was.

12:04:44 PM 12 Q. Do you have any knowledge of

12:04:46 PM 13 the fact that DeNoble's research was

12:04:50 PM 14 discontinued and terminated because it

12:04:53 PM 15 had adverse impacts for Philip Morris?

12:04:56 PM 16 A. I heard that but I couldn't

12:04:57 PM 17 understand how.

12:04:58 PM 18 Q. Who did you hear it from?

12:05:00 PM 19 A. I read it in the paper.

12:05:02 PM 20 Q. You didn't hear it then, you

12:05:02 PM 21 read it?

12:05:04 PM 22 A. Read it.

12:05:04 PM 23 Q. You didn't hear it from anyone

12:05:05 PM 24 in Philip Morris, correct?

12:05:07 PM 25 A. To the best of my knowledge,

12:05:09 PM 1 no.

12:05:10 PM 2 Q. And you didn't hear from

12:05:12 PM 3 anyone at Philip Morris that the lab

12:05:16 PM 4 was closed for any particular reason,

12:05:20 PM 5 just you read it in the papers?

12:05:22 PM 6 A. That's right.

12:05:23 PM 7 Q. Are you aware that you

12:05:25 PM 8 testified in the Small case in New York

12:05:27 PM 9 that you had heard from Philip Morris

12:05:29 PM 10 people at one time as a part of the

12:05:29 PM 11 cafeteria conversation that lawyers

12:05:33 PM 12 asked management to close down the

12:05:34 PM 13 research, do you recall that testimony?

12:05:37 PM 14 A. Yeah, I might recall that.

12:05:39 PM 15 Q. Does that jog your memory?

12:05:41 PM 16 A. Yeah, a little bit.

12:05:43 PM 17 Q. So, it was more than just in

12:05:46 PM 18 the newspapers, correct?

12:05:47 PM 19 A. Probably. I certainly

12:05:49 PM 20 remembered it at the time.

12:05:54 PM 21 Q. Were you friends with

12:05:56 PM 22 Dr. DeNoble?

12:05:57 PM 23 A. No.

12:05:58 PM 24 Q. Are you friends with him now?

12:06:00 PM 25 A. No.

12:06:17 PM 1 Q. Who is Dr. Uydess?

12:06:25 PM 2 A. He is a former Philip Morris

12:06:27 PM 3 employee.

12:06:28 PM 4 Q. Are you friends with him?

12:06:30 PM 5 A. I was at one time.

12:06:31 PM 6 Q. Did he do something with

12:06:35 PM 7 respect to the FDA that you feel was

12:06:37 PM 8 incorrect?

12:06:38 PM 9 A. Yes.

12:06:39 PM 10 Q. What did he do?

12:06:40 PM 11 A. He talked to the FDA about my

12:06:43 PM 12 work and greatly misrepresented what I

12:06:47 PM 13 did.

12:06:48 PM 14 Q. What did he tell the FDA?

12:06:50 PM 15 A. This has been quite awhile

12:06:52 PM 16 since I read his FDA testimony but he

12:06:57 PM 17 seemed -- remember, I have done a lot

12:07:00 PM 18 of pattern reversal evoke potentials.

12:07:00 PM 19 Q. Yes.

12:07:05 PM 20 A. And I've done a lot of

12:07:05 PM 21 olfactory evoke potentials. Somehow he

12:07:06 PM 22 mixed them all together and they were

12:07:10 PM 23 entirely unrelated, and so my work

12:07:12 PM 24 sounded nonsensical.

12:07:18 PM 25 Q. He was under oath at the time

12:07:20 PM 1 he made those statements, wasn't he?

12:07:23 PM 2 A. I suppose.

12:07:33 PM 3 Q. Are you familiar with the term

12:07:36 PM 4 biological activity?

12:07:38 PM 5 A. Yes.

12:07:39 PM 6 Q. Is that a euphemism at Philip

12:07:39 PM 7 Morris for terms such as carcinogenic,

12:07:47 PM 8 mutagenic, and teratogenic?

12:07:47 PM 9 A. It's a general term that is

12:07:49 PM 10 used to group all of those things,

12:07:53 PM 11 including precancerous kinds of growths

12:07:57 PM 12 and things of that nature. It's under

12:07:58 PM 13 one rubric.

12:08:00 PM 14 Q. And rubric, for the Jury's

12:08:06 PM 15 sake, is one general topic, correct?

12:08:07 PM 16 A. Right.

12:08:07 PM 17 Q. But in effect, what it means

12:08:08 PM 18 is carcinogenic, teratogenic,

12:08:08 PM 19 mutagenic -- biological effects,

12:08:11 PM 20 correct?

12:08:11 PM 21 A. No, it means more than that.

12:08:13 PM 22 Q. What else does it mean?

12:08:13 PM 23 A. It means precancerous lesions

12:08:18 PM 24 and just other kinds of things that

12:08:18 PM 25 happen after exposure.

12:08:21 PM 1 Q. Carcinogenic, or something
12:08:23 PM 2 that shows a carcinogenic effect, takes
12:08:23 PM 3 up precancerous though.

12:08:28 PM 4 Wouldn't polyps be
12:08:29 PM 5 considered -- such as polyps be
12:08:30 PM 6 considered in that same vein?

12:08:33 PM 7 A. That's entirely out of my
12:08:36 PM 8 area. You've just tapped my knowledge
9 there.

10 MR. HOPPER: We're about an
11 hour later from our last break.
12 Why don't we use this as a time to
13 stop.

12:09:27 PM 14 Videographer: We are going
12:09:29 PM 15 off the record at approximately
12:09:31 PM 16 12:08. This is the end of Tape
12:09:45 PM 17 One.

12:09:45 PM 18 (Following a lunch break, the
01:09:46 PM 19 following proceedings were had.)

01:09:46 PM 20 Videographer: Back on the
01:09:47 PM 21 record for the beginning of Tape
01:09:51 PM 22 Two at approximately 1:09.

01:09:51 PM 23 BY MR. HOPPER:

01:09:55 PM 24 Q. Dr. Gullotta, having sat for
01:09:55 PM 25 numerous other depositions, you know

01:09:56 PM 1 and are aware that you are still under
01:09:59 PM 2 oath?
01:09:59 PM 3 A. Yes.
01:10:00 PM 4 Q. We were talking about
01:10:03 PM 5 flavorants. Can you distinguish
01:10:06 PM 6 between cigarettes based upon flavoring
01:10:10 PM 7 testing?
01:10:11 PM 8 A. I'm not sure of the question
01:10:12 PM 9 you're asking me.
01:10:14 PM 10 Q. You use various flavorants to
01:10:19 PM 11 test cigarettes with smokers?
01:10:21 PM 12 A. Yes.
01:10:23 PM 13 Q. And can your EEG responses
01:10:29 PM 14 distinguish between cigarettes with
01:10:32 PM 15 various flavors added to them.
01:10:35 PM 16 MR. GAY: Object to the form.
01:10:36 PM 17 A. Well, as I mentioned, I can
01:10:40 PM 18 get response in the evoke potentials to
01:10:45 PM 19 menthol.
01:10:46 PM 20 Q. And menthol is a flavor?
01:10:48 PM 21 A. Yes.
01:10:49 PM 22 Q. So the answer to my question
01:10:51 PM 23 would be yes?
01:10:52 PM 24 A. In that case, it would be yes.
01:10:57 PM 25 Q. Are flavorants important, an

01:11:01 PM 1 important distinguishing character in
01:11:07 PM 2 cigarettes?
01:11:07 PM 3 A. I would say so.
01:11:08 PM 4 Q. And cigarette design?
01:11:11 PM 5 A. I would imagine so.
01:11:31 PM 6 Q. You have testified in other
01:11:33 PM 7 cases that you have done work with EEGs
01:11:37 PM 8 to measure the effect on the trigeminal
01:11:41 PM 9 nerve and ganglion response; is that
01:11:45 PM 10 true?
01:11:46 PM 11 A. I have not myself measured
01:11:49 PM 12 ganglionic responses. I have measured
01:11:53 PM 13 cortical responses to certain stimuli.
01:12:00 PM 14 Q. Can you describe that for the
01:12:03 PM 15 jury, which stimuli have you measured.
01:12:03 PM 16 A. Are you asking me what kinds
01:12:03 PM 17 of odorants and flavorants I've tested?
01:12:06 PM 18 Q. Yes.
01:12:06 PM 19 A. I've tested whole bunches.
01:12:08 PM 20 I've tested menthol from various
01:12:11 PM 21 sources, including synthetic menthol.
01:12:17 PM 22 I have measured responses to CO2,
01:12:20 PM 23 limonene, methyl salicylate.
01:12:25 PM 24 Q. Could you go a little bit
01:12:26 PM 25 slower for me --

01:12:26 PM 1 A. Oh, sure.

01:12:28 PM 2 Q. -- because I would like to

01:12:28 PM 3 take these down.

01:12:28 PM 4 You have tested menthol and

01:12:31 PM 5 synthetic menthol.

01:12:31 PM 6 A. Various menthols.

01:12:31 PM 7 Q. Okay.

01:12:33 PM 8 A. Menthols from different

01:12:37 PM 9 sources.

01:12:37 PM 10 Q. And responses to what?

01:12:39 PM 11 A. Limonene, CO2, vanillin,

01:12:53 PM 12 methyl salicylate. That's all I can

01:13:04 PM 13 think of right now.

01:13:07 PM 14 Also, isoamyl acetate.

01:13:07 PM 15 Q. Iso what?

01:13:15 PM 16 A. Amyl acetate.

01:13:15 PM 17 Q. Anything else that you can

01:13:17 PM 18 think of that you have tested?

01:13:21 PM 19 A. I'm sure there were others

01:13:24 PM 20 that doesn't come to me now.

01:13:26 PM 21 Q. How did you go about testing

01:13:29 PM 22 for these various flavorants?

01:13:32 PM 23 A. Actually, we put these

01:13:34 PM 24 odorants in a holding tank of the

01:13:37 PM 25 olfactometer and we bubbled air through

01:13:41 PM 1 the olfactometer and it was trapped in
01:13:45 PM 2 an air stream and was delivered to the
01:13:49 PM 3 subject's nose.
01:13:51 PM 4 Q. In an open context or through
01:13:54 PM 5 a tube into the nose?
01:13:57 PM 6 A. Through a tube into the nose.
01:14:00 PM 7 Q. Would you measure an evoke
01:14:03 PM 8 potential as the result?
01:14:06 PM 9 A. That's correct.
01:14:06 PM 10 Q. Would you use -- would you do
01:14:09 PM 11 that through a PREP study, through a
01:14:12 PM 12 pattern reversal response?
01:14:16 PM 13 A. Not in olfactory study.
01:14:16 PM 14 That's an entirely different kind of
01:14:19 PM 15 evoke potential.
01:14:19 PM 16 Q. Okay. I just wanted to be
01:14:19 PM 17 sure I was distinguishing between the
01:14:22 PM 18 two.
01:14:23 PM 19 A. Yeah.
01:14:33 PM 20 Q. Would this olfactory study
01:14:36 PM 21 that you described on these various
01:14:40 PM 22 types of compounds, synthetic menthols,
01:14:40 PM 23 limonene, CO2, vanillin, methyl
01:14:51 PM 24 salicylate, isoamyl acetate, would that
01:14:54 PM 25 come under the North Wind product

01:14:54 PM 1 development rubric?

01:14:56 PM 2 A. No.

01:14:56 PM 3 Q. What was the North Wind
01:14:58 PM 4 product?

01:14:58 PM 5 A. The North Wind product was a
01:15:01 PM 6 cigarette that was made with a menthol
01:15:04 PM 7 analogue called WS-14, which was not
01:15:08 PM 8 volatile. It had an odor -- it didn't
01:15:13 PM 9 have an odor but was minty and cool.

01:15:21 PM 10 Q. Can you describe for the Jury
01:15:22 PM 11 what you mean when you say that it was
01:15:25 PM 12 not volatile?

01:15:26 PM 13 A. Yes.

01:15:27 PM 14 It didn't have -- I don't know
01:15:29 PM 15 how to say it. It didn't have any
01:15:33 PM 16 vapor pressure. When people smelled
01:15:36 PM 17 it, they couldn't smell it.

01:15:36 PM 18 Q. That doesn't make any sense to
01:15:39 PM 19 me. When people went through the
01:15:41 PM 20 sensory process from a physiological,
01:15:46 PM 21 psychological standpoint to detect it,
01:15:48 PM 22 there was nothing there?

01:15:50 PM 23 A. If you smelled it, there would
01:15:52 PM 24 not be an odor.

01:15:54 PM 25 Q. For that WS-14 analogue?

01:16:01 PM 1 A. Yes.

01:16:02 PM 2 Q. Why is that?

01:16:04 PM 3 A. Because they made the molecule

01:16:06 PM 4 so it wasn't volatile. That is why it

01:16:11 PM 5 didn't have an odor.

01:16:14 PM 6 Q. What was the point of having

01:16:17 PM 7 it as a menthol in the North Wind

01:16:19 PM 8 product if you couldn't smell it or

01:16:22 PM 9 taste it?

01:16:23 PM 10 A. I have no direct knowledge. I

01:16:27 PM 11 would assume they thought there was a

01:16:28 PM 12 market out there for it because it was

01:16:31 PM 13 cooling and it provided impact.

01:16:34 PM 14 Q. So, it did have an impact, you

01:16:37 PM 15 just couldn't smell it?

01:16:39 PM 16 A. Right. We are speaking about

01:16:45 PM 17 different nerves now.

01:16:46 PM 18 Q. I understand. I'm just trying

01:16:54 PM 19 to understand it and distinguish

01:16:54 PM 20 between the sensory impact that you're

01:17:00 PM 21 describing.

01:17:01 PM 22 A. Yeah.

01:17:02 PM 23 Q. Now, you spoke earlier about

01:17:05 PM 24 in the EEG measurements, you have the

01:17:08 PM 25 latency and amplitude effects that you

01:17:13 PM 1 measure, correct?

01:17:14 PM 2 A. Are you speaking in terms of
01:17:18 PM 3 the pattern reversal evoke potential?

01:17:20 PM 4 Q. Yes.

01:17:21 PM 5 And you described how latency
01:17:24 PM 6 and amplitude works.

01:17:25 PM 7 Is nicotine the only compound
01:17:28 PM 8 that gives you a latency response?

01:17:32 PM 9 A. Well, the pattern reversal
01:17:34 PM 10 evoke potential has the latency
01:17:38 PM 11 whether you do anything to it or not.

01:17:42 PM 12 Q. Well, nicotine, is that the
01:17:45 PM 13 only compound that will give you a
01:17:47 PM 14 latency reading?

01:17:51 PM 15 A. I'm sorry. I don't understand
01:17:53 PM 16 your question.

01:17:55 PM 17 Q. I'm sorry I'm not formulating
01:17:58 PM 18 it in a way you can.

01:18:03 PM 19 You said you tested these
01:18:06 PM 20 various compounds.

01:18:08 PM 21 Did you get a latency reading
01:18:11 PM 22 from testing these menthols, synthetic
01:18:16 PM 23 menthols, et cetera, that you described
01:18:17 PM 24 when you put that to an EEG test or
01:18:20 PM 25 study?

1 A. Well, when you stimulate the
2 sense of smell with one of those
3 odorants, provided it's of threshold,
4 you get an evoke potential and an evoke
5 potential has the latency.

6 Q. Okay. So, the question is, if
7 you tested nicotine, is that the only
8 compound that would give you a latency
9 reading?

10 A. I'm sorry. I think you are
11 mixing up my olfactory work with my
12 panel reversal work.

13 Q. Okay. Help me understand it
14 then, and help the Jury understand it.

15 A. Well, I don't know if I can
16 because I'm not really sure of the
17 question that you are trying to ask me.

18 Q. Can you distinguish between
19 compounds as to latency?

20 MR. GAY: Object to the form.

21 A. In terms of the pattern
22 reversal evoke potential?

23 Q. Yes, that's what we are
24 talking about.

25 A. Can I distinguish between

01:19:15 PM 1 compounds?

01:19:16 PM 2 Q. Correct.

01:19:16 PM 3 A. I don't know. The only two
01:19:16 PM 4 that we looked at was nicotine as
01:19:19 PM 5 delivered in cigarette smoke and
01:19:19 PM 6 caffeine.

01:19:49 PM 7 Q. Did you distinguish a
01:19:51 PM 8 difference between nicotine and
01:19:52 PM 9 caffeine?

01:19:55 PM 10 A. Very little. I mean, they
01:19:55 PM 11 both produced a very small latency
01:19:59 PM 12 shift of about on the average three
01:20:04 PM 13 milliseconds. They looked about the
01:20:04 PM 14 same.

01:20:10 PM 15 But I should mention that I
01:20:11 PM 16 only did a couple of studies with
01:20:14 PM 17 caffeine, so I really don't know that
01:20:17 PM 18 much about it.

01:20:20 PM 19 Q. Would you say that caffeine
01:20:24 PM 20 then is a very close compound in terms
01:20:27 PM 21 of molecular structure or performance
01:20:30 PM 22 to nicotine.

01:20:32 PM 23 MR. GAY: Object to the form.

01:20:32 PM 24 A. I don't know how to answer
01:20:34 PM 25 that question.

01:20:34 PM 1 Q. When you said you tested
01:20:37 PM 2 nicotine in smoke and caffeine, you
01:20:42 PM 3 said there was very little difference
01:20:44 PM 4 between the two?
01:20:45 PM 5 A. Yes.
01:20:46 PM 6 Q. Would caffeine be the closest
01:20:49 PM 7 compound to emulate nicotine?
01:20:59 PM 8 A. Well, in the sense they both
01:21:00 PM 9 produce arousal.
01:21:07 PM 10 Q. And you get an EEG reading
01:21:10 PM 11 from each of them, correct?
01:21:12 PM 12 A. If I understand your question
01:21:15 PM 13 properly, I get a change in the evoke
01:21:18 PM 14 potential to both of them.
01:21:20 PM 15 Q. And different amplitudes and
01:21:22 PM 16 different latency, correct? But close?
01:21:23 PM 17 A. Well, I don't remember getting
01:21:27 PM 18 very much with respect to amplitudes
01:21:30 PM 19 with respect to caffeine.
01:21:33 PM 20 Q. What about latencies?
01:21:36 PM 21 A. Yeah. I get a latency shift.
01:21:40 PM 22 Q. But are you testifying there
01:21:42 PM 23 was not a remarkable difference between
01:21:44 PM 24 the two.
01:21:45 PM 25 MR. GAY: Object to the form.

01:21:45 PM 1 A. Well, they both produced the
01:21:49 PM 2 latency decrease, so I'm not speaking
01:21:52 PM 3 in terms of chemical structure or where
01:21:52 PM 4 it goes to the brain, they just produce
01:21:52 PM 5 the same effects on the pattern reverse
01:21:59 PM 6 evoke potential.

01:21:59 PM 7 As far as I know, they don't
01:22:01 PM 8 stimulate the same receptors, they
01:22:05 PM 9 don't go to the same parts of the
01:22:05 PM 10 brain.

01:22:07 PM 11 Q. Is there a different receptor
01:22:10 PM 12 site in the brain for caffeine that's
01:22:10 PM 13 separate from the nicotinic receptor
01:22:12 PM 14 sites?

01:22:12 PM 15 A. Yeah, but I don't know that
01:22:13 PM 16 much about it.

01:22:15 PM 17 Q. Do you know they are
01:22:17 PM 18 different?

01:22:17 PM 19 A. Yes.

01:22:18 PM 20 Q. You said you studied
01:22:20 PM 21 neuroanatomy earlier?

01:22:23 PM 22 A.. Yes.

01:22:24 PM 23 Q. What would be the difference
01:22:26 PM 24 between the two, from a neuroanatomical
01:22:31 PM 25 standpoint?

01:22:32 PM 1 A. Well, you would have to look
01:22:34 PM 2 at the distribution of the receptors to
01:22:36 PM 3 the two, but neuroanatomy just looks at
01:22:42 PM 4 gross structures and it's usually not
01:22:47 PM 5 in a live brain.

01:22:47 PM 6 Q. But you're not familiar enough
01:22:49 PM 7 with the neuroanatomy, or certainly as
01:22:49 PM 8 you testified, the neurochemistry to
01:22:49 PM 9 understand the different receptors
01:22:59 PM 10 between caffeine and nicotine?

01:22:59 PM 11 A. No, I haven't looked at the
01:22:59 PM 12 caffeine stuff in a long time.

01:23:33 PM 13 Q. Dr. Gullotta, have you looked
01:23:35 PM 14 at the Philip Morris website?

01:23:37 PM 15 A. I have.

01:23:39 PM 16 Q. Are you familiar with the
01:23:41 PM 17 composites of the ingredients that
01:23:45 PM 18 website says is added to tobacco?

01:23:50 PM 19 A. I think I have glanced at it
01:23:52 PM 20 but I haven't studied it.

01:23:55 PM 21 Q. I'm showing you what is Philip
01:23:59 PM 22 Morris' International's list of
01:24:04 PM 23 components.

01:24:05 PM 24 A. Is that Philip Morris
01:24:07 PM 25 International?

01:24:08 PM 1 Q. Yes.

01:24:08 PM 2 A. I have no idea then.

01:24:10 PM 3 Q. So, you have never seen the

01:24:12 PM 4 Philip Morris International website?

01:24:16 PM 5 A. I've seen the website, I don't

01:24:19 PM 6 think I have gone to the ingredients

01:24:21 PM 7 list.

01:24:22 PM 8 Q. I'm going to show you what is

01:24:24 PM 9 a list of ingredients here. And I'll

10 give you this part of it, too, so that

11 we have the whole --

12 (Tendering document.)

13 Take your time, Doctor.

14 However much time you need.

15 A. All right.

01:26:28 PM 16 Q. Had time to look at it?

01:26:30 PM 17 A. Yes. Scanned it.

01:26:32 PM 18 Q. Why don't you hang onto it and

01:26:34 PM 19 I'm going to ask you some questions.

01:26:37 PM 20 A. All right.

01:26:39 PM 21 Q. Are you familiar with these

01:26:40 PM 22 various compounds?

01:26:42 PM 23 A. A few.

01:26:43 PM 24 Q. Can you identify for me the

01:26:45 PM 25 ones you are familiar with?

01:26:47 PM 1 A. Acetic acid, benzaldehyde,
01:26:57 PM 2 cardamom seed oil, butyric acid.

3 Q. Hold on.

4 Cardamon seed oil, then what
5 was next?

6 A. Butyric acid was a little bit
7 before that.

01:27:18 PM 8 Carob bean and extract.

9 Carrot oil.

10 Q. Where is carob bean and
11 extract?

12 A. Just before carrot oil.

13 Q. Okay.

01:27:22 PM 14 A. On the Next page.

01:27:22 PM 15 Celery seed oil.

01:27:27 PM 16 Chamomile.

01:27:27 PM 17 Q. By Chamomile flower, roman
01:27:27 PM 18 extract and oil?

01:27:35 PM 19 A. That's it.

01:27:35 PM 20 Q. Okay.

01:27:35 PM 21 A. Cinnamaldehyde.

01:27:39 PM 22 Citral.

01:27:39 PM 23 Cocoa.

01:27:44 PM 24 Coffee.

01:27:46 PM 25 Coriander.

01:27:48 PM 1 Q. Where is that?

01:27:50 PM 2 A. Third from the bottom on the

01:27:52 PM 3 second page.

01:27:54 PM 4 Sugar. Corn syrup.

01:27:58 PM 5 Q. Hold on.

01:28:14 PM 6 You said coriander?

01:28:21 PM 7 A. Yes.

01:28:21 PM 8 Q. Okay.

01:28:24 PM 9 A. On the next page, diammonium

01:28:29 PM 10 phosphate, dill oil, ethyl vanillin --

01:28:39 PM 11 toward the bottom of the page --

01:28:44 PM 12 geraniol, on the top of the next page.

01:28:48 PM 13 Q. What is it?

01:28:50 PM 14 A. Geraniol.

01:28:54 PM 15 And then a little bit down,

01:28:54 PM 16 glycerol, ginger oil -- ginger oil and

01:28:56 PM 17 glycerol -- honey, alpha-ionone,

18 isoamyl acetate, isobutyl alcohol,

19 jasmine, lemon oil, licorice extract,

20 lime oil, linalool, menthol, L-menthol.

21 Down at the bottom of the

22 page. .Nutmeg oil.

01:29:48 PM 23 Next page. Orange oil, parsley

01:29:52 PM 24 oil, peppermint oil, phenethyl alcohol,

01:30:00 PM 25 pine oil.

01:30:05 PM 1 Q. Pine oil, Scotch?

01:30:05 PM 2 A. Yeah.

01:30:08 PM 3 Sandalwood oil.

01:30:12 PM 4 Sugar.

01:30:14 PM 5 Q. Where is -- I've got

01:30:14 PM 6 sandalwood oil, sugar.

01:30:17 PM 7 A. Alpha-terpineol, vanilla

01:30:17 PM 8 extract, and vanillin.

01:30:17 PM 9 Certainly know carbon dioxide

01:30:38 PM 10 and ethyl alcohol and water.

01:30:38 PM 11 Q. Generally, how is it that you

01:30:39 PM 12 are familiar with these various

01:30:41 PM 13 compounds that you have just

01:30:42 PM 14 identified?

01:30:43 PM 15 A. I have either worked with

01:30:45 PM 16 them, I have had colleagues that have

01:30:46 PM 17 worked with them, I've heard about them

01:30:47 PM 18 at scientific meetings, I have had

01:30:50 PM 19 personal experience with them. I've

01:30:50 PM 20 talked to flavor chemists.

01:30:53 PM 21 Q. When you have worked with them

01:30:55 PM 22 yourself, what have you done with these

01:30:56 PM 23 various compounds?

01:30:57 PM 24 A. Well, just a few of these.

01:31:00 PM 25 CO2 for example and isoamyl acetate and

01:31:06 PM 1 a couple of other ones, I have done
01:31:10 PM 2 olfactory evoke potentials with them.
01:31:15 PM 3 Q. Do you have documents and
01:31:15 PM 4 various papers that you've prepared of
01:31:18 PM 5 these studies?
01:31:18 PM 6 A. Have I written up these
01:31:19 PM 7 studies?
01:31:19 PM 8 Q. Yes.
01:31:21 PM 9 A. Yes.
01:31:21 PM 10 Q. Would it be possible to get
01:31:23 PM 11 copies of those?
01:31:26 PM 12 MR. GAY: Copies of what?
01:31:26 PM 13 MR. HOPPER: Of the studies,
01:31:27 PM 14 of the work he has done on the
01:31:30 PM 15 various compounds that he has
01:31:32 PM 16 identified that he personally has
01:31:32 PM 17 worked with.
01:31:35 PM 18 MR. GAY: I had no idea that
01:31:36 PM 19 was required this morning.
01:31:36 PM 20 BY MR. HOPPER:
01:31:36 PM 21 Q. If we made a formal discovery
01:31:41 PM 22 request of your counsel, what would we
01:31:43 PM 23 identify to obtain copies of these
01:31:44 PM 24 reports? How would we ask for them?
01:31:52 PM 25 Do they follow a certain

01:31:54 PM 1 rubric or a certain business customary
01:31:58 PM 2 procedure, or are they called annual
01:31:58 PM 3 reports, or --

01:32:13 PM 4 A. Sometimes annual reports,
01:32:13 PM 5 sometimes memos.

01:32:26 PM 6 Q. Excuse me one second, Doctor.
01:32:26 PM 7 Go ahead, Doctor. I'm sorry to have
01:32:27 PM 8 stopped you.

01:32:28 PM 9 A. I guess you would have to look
01:32:32 PM 10 at reports produced in
01:32:35 PM 11 electrophysiological studies. That was
01:32:39 PM 12 the name of my project.

01:32:41 PM 13 Q. And in particular, those that
01:32:43 PM 14 were done by you?

01:32:45 PM 15 A. Yes.

01:32:46 PM 16 Q. You would be the chief
01:32:48 PM 17 researcher?

01:32:49 PM 18 A. Yes.

01:32:49 PM 19 Q. Philip Morris has a library;
01:32:52 PM 20 is that correct?

01:32:52 PM 21 A. Yes.

01:32:53 PM 22 Q. If I were to make a formal
01:32:55 PM 23 discovery request to search that
01:32:58 PM 24 library, are there certain key words I
01:33:03 PM 25 would use?

01:33:03 PM 1 A. To access what kind of data?

01:33:07 PM 2 Q. The papers and the reports, or

01:33:07 PM 3 the memos, or the studies, or the

01:33:08 PM 4 annual reports that you just referred

01:33:10 PM 5 to?

01:33:11 PM 6 A. Those normally wouldn't be in

01:33:13 PM 7 the library.

01:33:14 PM 8 Q. They're not included in the

01:33:19 PM 9 library at all?

01:33:19 PM 10 A. Not part of PM R & D Library.

01:33:19 PM 11 Those are central file reports.

01:33:22 PM 12 Q. Would they be in a central

01:33:25 PM 13 file report?

01:33:26 PM 14 A. Yes.

01:33:27 PM 15 Q. What would the project number

01:33:27 PM 16 be, would you know?

01:33:28 PM 17 A. 1620.

01:33:28 PM 18 Q. Thank you.

01:33:39 PM 19 Do you recognize any other

01:33:42 PM 20 compounds on this list while we are

01:33:44 PM 21 still looking at it, Doctor?

01:33:49 PM 22 A. Not other than the ones I told

01:33:50 PM 23 you about.

01:33:51 PM 24 Q. You don't have any experience

01:33:51 PM 25 with any of these others?

01:33:52 PM 1 A. No.

01:33:52 PM 2 Q. You haven't done any tests or

01:33:53 PM 3 any studies, any pattern evoke

01:33:56 PM 4 potential studies or any other type of

01:33:56 PM 5 studies with any of these other

01:33:58 PM 6 compounds?

01:33:59 PM 7 A. I think you are mixing my

01:34:00 PM 8 olfactory work up with my pattern

01:34:03 PM 9 reversal work again. Pattern reversal

01:34:05 PM 10 had nothing to do with odorants.

01:34:07 PM 11 Q. Well, I don't care whether

01:34:07 PM 12 it's odorant or flavorant or PREP or

01:34:09 PM 13 what?

01:34:09 PM 14 A. You should.

01:34:10 PM 15 Q. Well, I don't want to know.

01:34:10 PM 16 MR. GAY: Objection. Don't

01:34:19 PM 17 tell him what you don't care about.

01:34:19 PM 18 Just ask the question.

01:34:19 PM 19 BY MR. HOPPER:

01:34:20 PM 20 Q. I'm not making any

01:34:21 PM 21 distinction. You are but I'm not.

01:34:21 PM 22 I just want to know have you

01:34:26 PM 23 done any studies or any research on any

01:34:28 PM 24 of the other compounds here?

01:34:32 PM 25 A. No.

01:34:52 PM 1 Q. Do you know how PMI came to
01:34:55 PM 2 formulate these 160 compounds for this
01:35:00 PM 3 list?
01:35:00 PM 4 A. No.
01:35:00 PM 5 Q. You weren't involved in that
01:35:02 PM 6 in any way?
01:35:04 PM 7 A. No.
01:35:05 PM 8 Q. Who was?
01:35:05 PM 9 A. I have no idea.
01:35:07 PM 10 Q. Would they have come from
01:35:16 PM 11 R & D?
01:35:16 PM 12 A. I have no idea.
01:35:16 PM 13 Q. Who would have generated this
01:35:16 PM 14 list for the website?
01:35:16 PM 15 MR. GAY: Object to the form
01:35:19 PM 16 A. I have no idea.
01:35:19 PM 17 BY MR. HOPPER:
01:35:22 PM 18 Q. You have never seen this list
01:35:24 PM 19 before today?
01:35:25 PM 20 MR. GAY: Object to the form.
01:35:26 PM 21 Asked and answered.
01:35:29 PM 22 A.. I don't think I looked on the
01:35:31 PM 23 PM website on ingredients, or the PMI
01:35:33 PM 24 website on ingredients.
01:35:36 PM 25 Q. I appreciate that. That's not

Produced by RARC
HUMPHREY

01:35:38 PM 1 exactly what my question was, but have
01:35:41 PM 2 you seen this list before today?
01:35:41 PM 3 A. No.
01:35:43 PM 4 Q. You never have?
01:35:45 PM 5 A. No.
01:36:40 PM 6 Q. Doctor, who is Jeffrey Seeman,
01:36:43 PM 7 do you know him?
01:36:44 PM 8 A. Yes.
01:36:44 PM 9 Q. Did he work for you?
01:36:46 PM 10 A. No.
01:36:46 PM 11 Q. Did he work with you?
01:36:48 PM 12 A. On occasion.
01:36:49 PM 13 Q. What did he do when you worked
01:36:51 PM 14 with him?
01:36:53 PM 15 A. I have worked with him on a
01:36:55 PM 16 number of occasions on a number of
01:36:57 PM 17 different things.
01:36:58 PM 18 Q. What is his title?
01:37:00 PM 19 A. He is retired now. He was a
01:37:02 PM 20 research biochemist.
01:37:05 PM 21 Q. Did he prepare compounds in
01:37:11 PM 22 the laboratory?
01:37:12 PM 23 A. At one time, he did.
01:37:14 PM 24 Q. Where was that?
01:37:14 PM 25 A. At PM.

01:37:16 PM 1 Q. Did he do it at INBIFO?

01:37:16 PM 2 A. Not to my knowledge, no.

01:37:16 PM 3 Q. Were you with him at INBIFO?

01:37:17 PM 4 A. No.

01:37:17 PM 5 Q. You never were with Jeff

01:37:19 PM 6 Seeman over at INBIFO?

01:37:24 PM 7 A. No.

01:37:24 PM 8 Q. Not at any time during the

01:37:26 PM 9 time you were there?

01:37:26 PM 10 MR. GAY: Objection. Asked

01:37:27 PM 11 and answered.

01:37:27 PM 12 A. No.

01:37:27 PM 13 BY MR. HOPPER:

01:37:27 PM 14 Q. Did he visit or come to work

01:37:30 PM 15 there infrequently?

01:37:31 PM 16 MR. GAY: Objection to the

01:37:32 PM 17 form.

01:37:32 PM 18 A. Not when I was there.

01:37:35 PM 19 Q. Did he go to INBIFO and work

01:37:39 PM 20 whether you were there or not?

01:37:41 PM 21 A. I don't think so.

01:37:42 PM 22 Q. So, you don't think Jeff

01:37:47 PM 23 Seeman ever went to INBIFO?

01:37:47 PM 24 MR. GAY: Object to the form.

01:37:50 PM 25 A. It's possible but I don't

01:37:52 PM 1 recall any instance of him going.

01:37:56 PM 2 Q. Okay.

01:38:12 PM 3 And who was your boss when you

01:38:14 PM 4 went to INBIFO?

01:38:18 PM 5 A. The managing director of the

01:38:22 PM 6 place is Wolf Reinghaus. My direct

01:38:26 PM 7 report was Hauserman.

01:38:28 PM 8 Q. Was Dr. Hauserman at INBIFO?

01:38:32 PM 9 A. At the time.

01:38:32 PM 10 Q. Did you still report to anyone

01:38:34 PM 11 back here at R & D when you were at

01:38:37 PM 12 INBIFO?

01:38:38 PM 13 A. No.

01:38:41 PM 14 Q. So once you moved to PMI

01:38:43 PM 15 International, you changed your

01:38:45 PM 16 reporting only to Dr. Hauserman?

01:38:48 PM 17 A. That's correct.

01:39:20 PM 18 Q. Do you have still have the

01:39:21 PM 19 list in front of you there?

01:39:23 PM 20 A. Yes.

01:39:24 PM 21 Q. If you look on the first page

01:39:26 PM 22 down several compounds, do you see

01:39:30 PM 23 acetylpyrazine?

01:39:33 PM 24 A. Oh, yeah.

01:39:34 PM 25 Q. Did you ever do any work with

01:39:42 PM 1 acetylpurazine?

01:39:44 PM 2 A. No.

01:39:44 PM 3 MR. GAY: Objection. Asked and

01:39:44 PM 4 answered.

01:39:44 PM 5 Q. If you look further over in

01:39:46 PM 6 the pages, do you see diethylpurazine?

01:39:57 PM 7 A. Where's it at? Which page? I

01:39:58 PM 8 see it. Okay. No, I never worked with

01:40:02 PM 9 that.

01:40:03 PM 10 MR. GAY: Objection. Asked

01:40:04 PM 11 and answered.

01:40:04 PM 12 BY MR. HOPPER:

01:40:08 PM 13 Q. If you look over at the next

01:40:08 PM 14 page, do you see

01:40:12 PM 15 2-ethyl-3-methylpurazine? Down at the

01:40:13 PM 16 bottom?

01:40:14 PM 17 A. Down at the bottom of the next

01:40:15 PM 18 page?

01:40:16 PM 19 Q. Yes.

01:40:19 PM 20 A. No.

01:40:19 PM 21 Q. (Indicating.)

01:40:20 PM 22 A. Oh, the same page. Here it

01:40:21 PM 23 is. Yes, I see it.

01:40:23 PM 24 Q. Did you ever work with

01:40:27 PM 25 2-ethyl-3-methylpurazine?

01:40:32 PM 1 A. No.

01:40:32 PM 2 MR. GAY: Object. Asked and

01:40:32 PM 3 answered.

01:40:48 PM 4 MR. HOPPER: Let's mark this

01:40:48 PM 5 as an exhibit, please. I think it

01:40:52 PM 6 will be Gullotta Exhibit Number 4.

01:40:52 PM 7 (Whereupon, the document was

01:40:52 PM 8 marked as Gullotta Exhibit No. 4

01:41:09 PM 9 for Id.)

01:41:09 PM 10 BY MR. HOPPER:

01:41:09 PM 11 Q. Do you recognize this,

01:41:11 PM 12 Dr. Gullotta?

01:41:12 PM 13 A. Yes.

01:41:12 PM 14 Q. Can you identify it for the

01:41:14 PM 15 Jury?

01:41:15 PM 16 A. I think it's the chemical

01:41:16 PM 17 structure of nicotine.

01:41:18 PM 18 Q. Can you describe the molecular

01:41:22 PM 19 structure there in front of you?

01:41:22 PM 20 A. No.

01:41:25 PM 21 Q. Are you aware that these are

01:41:29 PM 22 pyrazine and pyridine rings?

01:41:30 PM 23 A. I have heard that.

01:41:31 PM 24 Q. Have you ever worked with any

01:41:33 PM 25 of the pyrazine compounds?

Produced by RRTC
HUMPHREY

01:41:36 PM 1 A. No.

01:41:38 PM 2 Q. You have never developed or

01:41:39 PM 3 worked with any pyrazine compounds?

01:41:41 PM 4 A. Not that I would recognize.

01:41:42 PM 5 Q. Has Jeffrey Seeman ever

01:41:42 PM 6 synthesized any pyrazine compounds that

01:41:44 PM 7 you know of?

01:41:44 PM 8 A. I have no idea.

01:41:45 PM 9 Q. You don't know?

01:41:47 PM 10 A. Don't know.

01:41:48 PM 11 MR. HOPPER: I want to get a

01:41:49 PM 12 shot of this, Mr. Videographer, for

01:41:52 PM 13 the Jury to be sure. Can you focus

01:41:55 PM 14 in on it.

01:41:57 PM 15 Videographer: I have it.

01:41:58 PM 16 MR. HOPPER: I'm happy to share

01:42:00 PM 17 this with counsel. Take a look at

01:42:07 PM 18 it. We will mark this as Gullotta

01:42:14 PM 19 Exhibit Number 5.

01:42:14 PM 20 (Whereupon, the document was

01:42:14 PM 21 marked as Gullotta Exhibit Number 5

01:42:25 PM 22 for Id.)

01:42:25 PM 23 BY MR. HOPPER:

01:42:25 PM 24 Q. At any time while you were at

01:42:27 PM 25 INBIFO or here at PMI, Philip Morris

01:42:33 PM 1 USA, did you ever develop or work with
01:42:37 PM 2 any nicotine analogues?

01:42:38 PM 3 A. I certainly didn't develop. I
01:42:42 PM 4 worked with one nicotine analogue.

01:42:45 PM 5 Q. What was that?

01:42:47 PM 6 A. R-nicotine.

01:42:47 PM 7 Q. R-nicotine?

01:42:47 PM 8 A. Um-hum.

01:42:48 PM 9 Q. What is R-nicotine?

01:42:50 PM 10 A. It is the stereo isomer of
01:43:04 PM 11 S-nicotine.

01:43:17 PM 12 Q. And what is S-nicotine? Are
01:43:21 PM 13 you going to tell me that's the stereo
01:43:21 PM 14 isomer of R-nicotine?

01:43:24 PM 15 A. It's the naturally occurring
01:43:26 PM 16 form.

01:43:27 PM 17 Q. In tobacco?

01:43:28 PM 18 A. Yes.

01:43:28 PM 19 Q. So, that wouldn't be a
01:43:30 PM 20 nicotine analogue, it would be the
01:43:33 PM 21 naturally occurring form of nicotine,
01:43:35 PM 22 correct?

01:43:36 PM 23 A. Correct.

01:43:37 PM 24 Q. Is there such a thing as
01:43:39 PM 25 L-nicotine?

01:43:42 PM 1 A. Yeah.

01:43:44 PM 2 Q. What is that?

01:43:46 PM 3 A. I forget. That's an old

01:43:51 PM 4 nomenclature and I can't recall if it

01:43:54 PM 5 refers to the R or the S.

01:43:58 PM 6 Q. Is it L-eleexo?

01:43:58 PM 7 A. Yeah, that would be left

01:43:58 PM 8 rotation?

01:43:58 PM 9 Q. Um-humm.

01:43:59 PM 10 A. And other one is right

01:44:03 PM 11 rotation.

01:44:03 PM 12 Q. Stereoisometric compound?

01:44:06 PM 13 A. Right.

01:44:06 PM 14 Q. And what is D-nicotine?

01:44:09 PM 15 A. That would be -- I think

01:44:12 PM 16 that's S-nicotine. I'm not sure.

01:44:15 PM 17 Q. So, you know L-nicotine and

01:44:15 PM 18 D-nicotine in the new nomenclature form

01:44:21 PM 19 as R and S, correct?

01:44:22 PM 20 A. Correct.

01:44:23 PM 21 Q. Which corresponds to which

01:44:24 PM 22 again, for the Jury?

01:44:26 PM 23 A. I think -- I could be

01:44:28 PM 24 absolutely wrong with it. I think L is

01:44:31 PM 25 R, and D is S, but I could be exactly

01:44:38 PM 1 opposite.

01:44:40 PM 2 I'll tell you, I'm not a

01:44:49 PM 3 chemist.

01:45:00 PM 4 Q. Well, the natural form or the

01:45:06 PM 5 natural nicotine would be which

01:45:10 PM 6 again -- S?

01:45:13 PM 7 A. S-nicotine, yes.

01:45:15 PM 8 Q. Are you certain about that?

01:45:16 PM 9 A. Yes.

01:45:18 PM 10 Q. Are you certain that L doesn't

01:45:31 PM 11 correspond to S?

01:45:31 PM 12 A. It may very well. That, I'm

01:45:31 PM 13 not certain about at all.

01:45:31 PM 14 Q. Is R a safe compound in

01:45:36 PM 15 nicotine?

01:45:37 PM 16 A. I'm sorry --

01:45:38 PM 17 Q. Is R, the R form of nicotine,

01:45:42 PM 18 is it safe to give to people?

01:45:45 PM 19 MR. GAY: Object to the form.

01:45:46 PM 20 A. It's much less potent than

01:45:49 PM 21 S-nicotine on most of the tests that

01:45:52 PM 22 has been run on it.

01:45:54 PM 23 Q. And when you use the word

01:45:57 PM 24 potent for the Jury, what do you mean?

01:45:57 PM 25 A. I mean it's less

01:46:02 PM 1 physiologically active.

01:46:02 PM 2 Q. Is it less toxic?

01:46:04 PM 3 A. On most tests, yes.

01:46:21 PM 4 Q. In looking at your list again,

01:46:24 PM 5 of those pyrazines that I asked you

01:46:26 PM 6 about, is it your testimony today that

01:46:29 PM 7 you have never done any work on any

01:46:33 PM 8 nicotine analogues involving those

01:46:35 PM 9 pyrazines?

01:46:35 PM 10 MR. GAY: Object. That is at

01:46:39 PM 11 least the fourth time he's been

01:46:39 PM 12 asked that question.

01:46:39 PM 13 A. The only analogue I have

01:46:41 PM 14 worked with in any of my tests has been

01:46:46 PM 15 R-nicotine.

01:47:14 PM 16 Q. Have you ever worked with any

01:47:16 PM 17 alka or aza pyridines?

01:47:21 PM 18 A. I'm not even sure what they

01:47:24 PM 19 are.

01:47:24 PM 20 Q. As compared to the pyrazines.

01:47:28 PM 21 You don't know what those are?

01:47:31 PM 22 A. No.

01:47:31 PM 23 Q. Are you familiar with the 2,6

01:47:31 PM 24 dialkapyradine?

01:47:31 PM 25 MR. GAY: Objection.

01:47:34 PM 1 A. No.

01:47:34 PM 2 Q. You have never worked with

01:47:35 PM 3 that?

01:47:36 PM 4 A. Not to my knowledge.

01:47:38 PM 5 MR. GAY: Objection.

01:48:02 PM 6 Q. Have you ever used any hydroxy

01:48:07 PM 7 substituted nicotinoids in any of your

01:48:09 PM 8 research involving EEGs?

01:48:13 PM 9 MR. GAY: Object to the form.

01:48:14 PM 10 A. No.

01:48:14 PM 11 BY MR. HOPPER:

01:48:24 PM 12 Q. Did you work on a project

01:48:26 PM 13 dealing with isolation and

01:48:28 PM 14 identification of nicotine in the

01:48:31 PM 15 central nervous system receptors?

01:48:37 PM 16 A. No.

01:49:00 PM 17 Q. Have you ever seen any

01:49:01 PM 18 biological testing regarding the

01:49:04 PM 19 difference between brands that your

01:49:07 PM 20 company produces, brands of cigarettes,

01:49:10 PM 21 that is.

01:49:11 PM 22 MR. GAY: Object to the form.

01:49:12 PM 23 A. No.

01:49:13 PM 24 Q. Are you aware of any studies

01:49:15 PM 25 that were ever conducted at Philip

01:49:19 PM

1 Morris USA or Philip Morris
2 International where you worked that
3 tested finished products for
4 carcinogenic, teratogenic or mutagenic
5 effects?

6 MR. GAY: Object to the form.

7 A. No, it's outside my area.

8 BY MR. HOPPER:

9 Q. But are you aware of those
10 tests that's ever been done?

01:49:32 PM

11 A. No.

01:49:33 PM

12 Q. To your knowledge none have
13 ever been done?

01:49:34 PM

01:49:37 PM

14 A. I know there were some tests
15 that were going on there. I don't know
16 specifically what they tested.

01:49:39 PM

01:49:43 PM

01:49:44 PM

17 Q. For finished products?

01:49:44 PM

18 A. I don't know if it's even in
19 finished product.

01:49:47 PM

01:49:47 PM

20 Q. Are you aware of any
21 biological activity protocols that have
22 been developed at Philip Morris USA or
23 Philip Morris International?

01:49:49 PM

01:49:52 PM

01:49:56 PM

01:49:56 PM

24 MR. GAY: Object to the form.

01:49:58 PM

25 A. No. That is outside of my

01:50:00 PM 1 area.

01:50:00 PM 2 BY MR. HOPPER:

01:50:01 PM 3 Q. Are you aware of any
01:50:02 PM 4 protocols?

01:50:03 PM 5 A. I'm not really sure what
01:50:06 PM 6 protocol is in terms of that.

01:50:45 PM 7 MR. HOPPER: Why don't you
01:50:46 PM 8 give me a few minutes.

01:50:52 PM 9 Videographer: Off the record
01:50:53 PM 10 at approximately 1:50.

01:51:25 PM 11 (FOLLOWING A BRIEF RECESS, THE
01:51:25 PM 12 FOLLOWING PROCEEDINGS WERE HAD:)

02:04:17 PM 13 VIDEOGRAPHER: Back on the
02:04:18 PM 14 record at approximately 2:03.

02:04:18 PM 15 BY MR. HOPPER:

02:04:24 PM 16 Q. Dr. Gullotta, are you familiar
02:04:27 PM 17 within Philip Morris USA or Philip
02:04:28 PM 18 Morris International anywhere in the
02:04:31 PM 19 company that any of the research
02:04:32 PM 20 scientists developed any chemical
02:04:37 PM 21 reaction modeling for pharmacological
02:04:41 PM 22 activity, any computer modeling?

02:04:45 PM 23 MR. GAY: Object to the form.

02:04:45 PM 24 A. No, I don't know anything
02:04:46 PM 25 about that.

02:04:46 PM 1 BY MR. HOPPER:

02:04:47 PM 2 Q. You haven't done any work in
02:04:49 PM 3 that regard?

02:04:51 PM 4 A. No.

02:04:52 PM 5 Q. And you don't know any other
02:04:54 PM 6 scientists who did?

02:04:57 PM 7 A. No.

02:05:22 PM 8 Q. How long did you work with
02:05:24 PM 9 Jeff Seeman?

02:05:26 PM 10 A. I never directly worked with
02:05:28 PM 11 Jeff Seeman. We had occasions to
02:05:33 PM 12 interact with respect to him making
02:05:36 PM 13 solutions to spray on cigarettes. We
02:05:39 PM 14 have had, we have sat on various
02:05:42 PM 15 committees together but never directly
02:05:45 PM 16 worked with him.

02:05:47 PM 17 Q. Who else did you work with
02:05:48 PM 18 that did the same or similar jobs as
02:05:51 PM 19 Jeff Seeman?

02:05:54 PM 20 A. I didn't work with that group
02:05:57 PM 21 very much at all.

02:05:58 PM 22 Q. And that group was which group
02:06:01 PM 23 again?

02:06:01 PM 24 A. I think it was called
02:06:03 PM 25 biochemical studies.

02:06:05 PM 1 Q. That's what I believe it was
02:06:07 PM 2 called, the biochemical research
02:06:10 PM 3 division?

02:06:11 PM 4 A. No, that is something
02:06:12 PM 5 different.

02:06:13 PM 6 Q. Okay. The question was, who
02:06:17 PM 7 else did you work with in that
02:06:19 PM 8 biochemical studies division that you
02:06:22 PM 9 just identified other than Jeff Seeman?

02:06:30 PM 10 A. Are you asking me what other
02:06:34 PM 11 people worked on my project or who else
02:06:38 PM 12 was in the division?

02:06:39 PM 13 Q. There were other people who
02:06:41 PM 14 worked with Jeff Seeman in that
02:06:45 PM 15 division, correct?

02:06:46 PM 16 A. In that project?

02:06:47 PM 17 Q. In any project but in that
02:06:49 PM 18 division, the biochemical studies
02:06:52 PM 19 division, or group, or whatever way is
02:06:57 PM 20 the appropriate way to describe it.

02:06:57 PM 21 MR. GAY: Object to the form.

02:06:58 PM 22 A. They are two different things.
02:07:01 PM 23 One was the biochemical -- had a
02:07:03 PM 24 number, project number -- and then
02:07:03 PM 25 there was the biochemical research

02:07:06 PM 1 division, which were two different
02:07:07 PM 2 things.

02:07:08 PM 3 Q. Did Jeff Seeman work in the
02:07:12 PM 4 biochemical research division?

02:07:14 PM 5 A. Don't know.

02:07:15 PM 6 Q. Who else did you work with in
02:07:17 PM 7 the biochemical research division?

02:07:20 PM 8 A. I think there were five or six
02:07:22 PM 9 different projects and they would
02:07:24 PM 10 include people like the people who
02:07:24 PM 11 worked in my laboratory, of course, and
02:07:27 PM 12 then --

02:07:27 PM 13 Q. Did they have names?

02:07:29 PM 14 A. Oh, sure.

02:07:30 PM 15 Q. Who were they?

02:07:30 PM 16 A. That worked in my laboratory?

02:07:32 PM 17 Q. Yes. Who did you work with in
02:07:34 PM 18 that department or group, their names?

02:07:38 PM 19 MR. GAY: Counsel, you are
02:07:39 PM 20 raising your voice.

02:07:41 PM 21 MR. HOPPER: I have asked him
02:07:43 PM 22 four or five times, Charlie.

23 MR. GAY: Excuse me. No, you
24 haven't.

25 MR. HOPPER: Charlie, I said,

1 who else did you work for?

2 MR. GAY: Every question thus
3 far --

02:07:49 PM 4 MR. HOPPER: Which English
02:07:49 PM 5 word is not clear. Who else did
02:07:51 PM 6 you work with. It's pretty clear.

02:07:51 PM 7 MR. GAY: Mr. Hopper, look, I
02:07:51 PM 8 don't want to argue with you.

02:08:05 PM 9 MR. HOPPER: I don't either.
02:08:05 PM 10 I'm just trying to get the names,
02:08:05 PM 11 that's all, and we can finish.

02:08:05 PM 12 MR. GAY: That's fine. Just
02:08:05 PM 13 let me clarify the record.

02:08:07 PM 14 MR. HOPPER: Go ahead.

02:08:07 PM 15 MR. GAY: That's the first
02:08:07 PM 16 time you asked that question -- who
02:08:07 PM 17 he worked with. You were asking
02:08:07 PM 18 all sorts of questions about all
02:08:10 PM 19 sorts of divisions, projects, what
02:08:14 PM 20 have you, and then you raise your
02:08:15 PM 21 voice to the witness. I'm just
02:08:18 PM 22 trying to make the record clear. I
02:08:21 PM 23 don't think that was appropriate.
02:08:21 PM 24 So, let him answer your question.
02:08:23 PM 25 Who did he work with, that's fine.

02:08:23 PM 1 MR. HOPPER: I believe for the
02:08:23 PM 2 record the very first question I
02:08:26 PM 3 asked was who else did you work
02:08:27 PM 4 with.

02:08:30 PM 5 MR. GAY: The record will
02:08:31 PM 6 speak for itself.

02:08:33 PM 7 Let's go on.

02:08:33 PM 8 BY MR. HOPPER:

02:08:33 PM 9 Q. That's fine. Doctor, you can
02:08:35 PM 10 answer.

02:08:35 PM 11 A. You want to know who the other
02:08:37 PM 12 people in my project were?

02:08:47 PM 13 Q. No, the question was, who else
02:08:47 PM 14 did you work with in the biochemical
02:08:47 PM 15 research division?

02:08:47 PM 16 A. I didn't work with anybody
02:08:47 PM 17 else in the biochemical research
02:08:51 PM 18 division.

02:08:51 PM 19 Q. Who did you work with on your
02:08:53 PM 20 projects?

02:08:53 PM 21 A. That would be Cindy Hayes,
02:08:56 PM 22 Bobby Martin. Earlier times, it would
02:09:00 PM 23 have included M. Gar Wannamaker. It
02:09:02 PM 24 would have included Alice Frankovich.
02:09:04 PM 25 It would have included Elizabeth Gay.

02:09:07 PM 1 And that is it.

02:09:08 PM 2 Q. Did these persons that you
02:09:11 PM 3 have just identified hold a job similar
02:09:14 PM 4 to Jeff Seeman?

02:09:16 PM 5 A. No.

02:09:17 PM 6 Q. The question also earlier was
02:09:18 PM 7 who did you work with who held a job
02:09:22 PM 8 similar to the job that Jeff Seeman
02:09:27 PM 9 held?

02:09:28 PM 10 A. I had occasion to deal with
02:09:28 PM 11 these people but I didn't work with
02:09:29 PM 12 them. It would have included people
02:09:30 PM 13 like Ted Sanders.

02:09:35 PM 14 Q. Okay.

02:09:37 PM 15 A. That's all I can think of
02:09:40 PM 16 right now.

02:09:43 PM 17 Q. Okay. What about in the
02:09:52 PM 18 biochemical studies group. Who did you
02:09:56 PM 19 work with in that group?

02:09:58 PM 20 A. Nobody.

02:09:59 PM 21 Q. Who worked with you from that
02:10:02 PM 22 group on your projects?

02:10:08 PM 23 A. I don't think anybody.

02:10:09 PM 24 Q. Okay. Jeff Seeman synthesized
02:10:15 PM 25 various compounds or solutions in his

02:10:17 PM 1 biochemical lab, right?

02:10:19 PM 2 A. Right.

02:10:19 PM 3 Q. Who else did that kind of work
02:10:22 PM 4 at Philip Morris USA or Philip Morris
02:10:22 PM 5 International?

02:10:23 PM 6 A. There was Ted Sanders, is the
02:10:26 PM 7 only one I can recall.

02:10:28 PM 8 Q. For the entire time you have
02:10:31 PM 9 been there?

02:10:32 PM 10 A. There were others that are
02:10:33 PM 11 just not coming to me now. There were
02:10:37 PM 12 more people. And people came and left
02:10:40 PM 13 that I can't recall their names.

02:10:44 PM 14 MR. HOPPER: I don't think I
02:10:45 PM 15 have any further questions at this
02:10:46 PM 16 time, Counsel.

02:10:46 PM 17 MR. GAY: Let me ask just a few
02:10:48 PM 18 questions of you, Dr. Gullotta.

02:10:48 PM 19 * * *

02:10:48 PM 20 CROSS EXAMINATION

02:10:54 PM 21 BY MR. GAY.

02:10:54 PM 22 Q. You were asked about North
02:10:55 PM 23 Wind?

02:10:55 PM 24 A. Yes.

02:10:56 PM 25 Q. You never worked on anything

02:10:59 PM 1 dealing with North Wind, did you?

02:11:02 PM 2 A. Absolutely not.

02:11:05 PM 3 Q. Now, can you characterize for
02:11:08 PM 4 the Jury what was the basic purpose of
02:11:12 PM 5 your EEG work at Philip Morris?

02:11:18 PM 6 A. It was basic research trying
02:11:21 PM 7 to understand things better.

02:11:24 PM 8 Q. And what type of things were
02:11:26 PM 9 you trying to understand better from
02:11:29 PM 10 your EEG work?

02:11:29 PM 11 MR. HOPPER: Objection to the
02:11:34 PM 12 form.

02:11:34 PM 13 A. Well, with the pattern
02:11:36 PM 14 reversal evoke potentials, I wanted to
02:11:38 PM 15 understand what the effects of smoking
02:11:38 PM 16 on the pattern reversal evoke
02:11:41 PM 17 potentials was and what it could
02:11:43 PM 18 contribute to our understanding of
02:11:46 PM 19 cigarette smoke.

02:11:47 PM 20 Q. Was part of your work with the
02:11:49 PM 21 PREP and EEG work to determine whether
02:11:54 PM 22 cigarettes were addictive?

02:11:56 PM 23 A. You can't possibly do that
02:11:58 PM 24 with that technique.

02:12:00 PM 25 Q. That was not part of your

02:12:02 PM 1 work?

02:12:02 PM 2 A. No, absolutely not.

02:12:03 PM 3 Q. Did your work answer the

02:12:05 PM 4 question why people smoke?

02:12:05 PM 5 A. No, it just gave a good piece

02:12:09 PM 6 of the answer.

02:12:09 PM 7 Q. Did it add to the store of

02:12:11 PM 8 information available as to why people

02:12:14 PM 9 smoke?

02:12:14 PM 10 A. Yes.

02:12:15 PM 11 Q. Did you coordinate your work

02:12:19 PM 12 with the EEG with product development?

02:12:24 PM 13 A. Absolutely not.

02:12:27 PM 14 Q. What is extracted tobacco?

02:12:31 PM 15 A. There are various ways of

02:12:32 PM 16 extracting tobacco. The ones that we

02:12:35 PM 17 use most recently was supercritical

02:12:39 PM 18 CO₂, and what you do is you take out

02:12:43 PM 19 nicotine and some analogues -- I mean

02:12:45 PM 20 nicotine and minor alkaloids and some

02:12:47 PM 21 flavors and essential oils.

02:12:53 PM 22 Q. And did you do any of your

02:12:56 PM 23 studies or experiments using extracted

02:13:01 PM 24 tobacco?

02:13:01 PM 25 A. Yes. Routinely.

02:13:03 PM 1 Q. In any of those studies, did
02:13:06 PM 2 you have the subjects describe the
02:13:09 PM 3 taste to you of the extracted tobacco?

02:13:12 PM 4 A. Yes.

02:13:13 PM 5 Q. Tell us what you found.

02:13:16 PM 6 MR. HOPPER: Object to the
02:13:18 PM 7 form. Calls for speculation.

02:13:18 PM 8 BY MR. GAY:

02:13:21 PM 9 Q. Tell us what happened when you
02:13:22 PM 10 used -- when the subjects of your
02:13:25 PM 11 studies described extracted tobacco.

02:13:31 PM 12 MR. HOPPER: Same objection.

02:13:32 PM 13 A. I put a flavor ballot in front
02:13:37 PM 14 of them and as the amount of extracted
02:13:39 PM 15 tobacco was in the cigarette, it got
02:13:40 PM 16 increasing bad, more bad tasting, the
02:13:44 PM 17 awful taste scores went up.

02:13:47 PM 18 Q. So, the more extracted tobacco
02:13:49 PM 19 you used in the experiment, the worse
02:13:53 PM 20 the subjects described the taste?

02:13:56 PM 21 A. Right.

02:13:56 PM 22 Q. Now, is the product that was
02:13:58 PM 23 tested, test-marketed by Philip Morris,
02:14:03 PM 24 the Next cigarette, was it made from
02:14:05 PM 25 extracted tobacco?

02:14:07 PM 1 A. It was.

02:14:08 PM 2 Q. That's the cigarette, the Next

02:14:11 PM 3 cigarette, you described as having a

02:14:13 PM 4 bad taste?

02:14:14 PM 5 A. That's correct.

02:14:15 PM 6 Q. And that was consistent with

02:14:17 PM 7 what you found in your use of extracted

02:14:24 PM 8 tobacco with your subjects?

02:14:24 PM 9 A. That's correct.

02:14:24 PM 10 MR. HOPPER: Objection. That

02:14:26 PM 11 mischaracterizes the witness'

02:14:26 PM 12 earlier testimony. He never said

02:14:27 PM 13 it had to do with taste.

02:14:33 PM 14 MR. GAY: I think he said

15 that's why it failed --

16 MR. HOPPER: No.

17 MR. GAY: -- in the testimony.

18 But the record will speak for

19 itself.

20 BY MR. GAY:

02:14:35 PM 21 Q. In any event, the point is

02:14:37 PM 22 when you used extracted tobacco in your

02:14:41 PM 23 studies, the more extracted tobacco

02:14:44 PM 24 that you used, the more the subjects

02:14:48 PM 25 described the taste as being bad?

02:14:50 PM 1 A. Right.

02:14:59 PM 2 Q. Now, would you please describe
02:15:03 PM 3 to the Jury the difference between what
02:15:09 PM 4 you have described as your pattern
02:15:12 PM 5 reversal evoke potential studies and
02:15:16 PM 6 your taste or olfactory studies.

02:15:24 PM 7 MR. HOPPER: Objection to form
02:15:25 PM 8 and asked and answered.

02:15:26 PM 9 A. The pattern reversal evoke
02:15:30 PM 10 potential is a visual study. The
02:15:34 PM 11 olfactory studies were mainly to
02:15:38 PM 12 investigate the sense of smell and they
02:15:40 PM 13 were unrelated to each other.

02:15:53 PM 14 Q. Would you describe this as
02:15:55 PM 15 basic scientific research that you did
02:15:58 PM 16 in both these areas?

02:16:01 PM 17 A. I would.

02:16:02 PM 18 MR. HOPPER: Objection. Lack
02:16:03 PM 19 of foundation.

02:16:05 PM 20 MR. GAY: No further
02:16:05 PM 21 questions.

02:16:07 PM 22 Thank you, Dr. Gullotta.

23 THE WITNESS: Thank you.

24 MR. HOPPER: I have a question
25 or two.

* * *

REDIRECT EXAMINATION

BY MR. HOPPER:

02:16:11 PM 4 Q. Dr. Gullotta, I believe you
02:16:12 PM 5 testified earlier that in your
02:16:14 PM 6 olfactory studies that you also used an
02:16:18 PM 7 EEG or took an EEG reading or
02:16:23 PM 8 measurement along with production of
02:16:27 PM 9 the different odorants you tested on
02:16:31 PM 10 the subjects, correct?

02:16:33 PM 11 A. Absolutely true.

02:16:34 PM 12 Q. So even in the PREP where you
02:16:37 PM 13 have an evoke potential, and that's a
02:16:39 PM 14 visual study, you used the EEG in the
02:16:42 PM 15 PREP, correct?

02:16:43 PM 16 A. Correct.

02:16:43 PM 17 Q. And you used the EEG in the
02:16:43 PM 18 olfactory studies, correct?

02:16:43 PM 19 A. Correct.

02:16:46 PM 20 Q. So, when you say they are
02:16:46 PM 21 unrelated, you can't say they are
02:16:47 PM 22 unrelated in that regard, can you?

02:16:58 PM 23 MR. GAY: Objection.

02:16:58 PM 24 Argumentative.

02:16:58 PM 25 A. Look, the sense of smell and

02:16:58 PM 1 the sense of vision are not related.

02:16:58 PM 2 Whether I'm using the same piece of

02:17:02 PM 3 electronics to get to one or the other,

02:17:05 PM 4 doesn't really make any difference.

02:17:05 PM 5 Q. Well, the sense of smell, and

02:17:07 PM 6 you're the expert in physiological

02:17:09 PM 7 psychology, but the sense of smell and

02:17:11 PM 8 the part of the nervous system relating

02:17:16 PM 9 to vision is located in the brain,

02:17:18 PM 10 isn't it?

02:17:18 PM 11 A. Yes.

02:17:19 PM 12 Q. Let's say they are related in

02:17:20 PM 13 that regard, aren't they?

02:17:22 PM 14 A. Yes. They are both in the

02:17:25 PM 15 brain, absolutely.

02:17:26 PM 16 Q. They both respond to sensory

02:17:29 PM 17 perception, correct?

02:17:29 PM 18 A. Absolutely.

02:17:30 PM 19 Q. And they both can be tested

02:17:33 PM 20 through EEG measurement, correct?

02:17:38 PM 21 A. Absolutely.

02:17:38 PM 22 MR. HOPPER: No further

02:17:38 PM 23 questions.

02:17:41 PM 24 /

02:17:41 PM 25 /

02:17:41 PM

1

Videographer: This deposition

02:17:43 PM

2

is over. It's approximately 2:17

02:17:47 PM

3

and we are off the record.

4

5

(Whereupon, the deposition was

6

concluded and the witness was

7

excused.)

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

produced by RJRTC
in
HUMPHREY

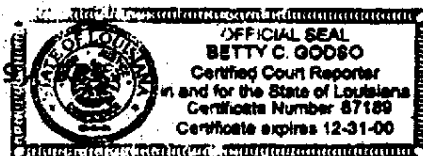
C E R T I F I C A T E

I, BETTY C. GODSO, CERTIFIED SHORTHAND
REPORTER, #87189, REALTIME REPORTER, REGISTERED
PROFESSIONAL REPORTER #005405, AND DEPUTY CLERK
OF COURT IN AND FOR THE STATE OF LOUISIANA DO
HEREBY CERTIFY; THAT THE WITNESS WAS SWORN TO
TELL THE TRUTH, THE WHOLE TRUTH, AND NOTHING
BUT THE TRUTH IN SAID CAUSE; THAT THE FOREGOING
TESTIMONY WAS TAKEN BY ME IN STENOGRAPHY AND
THEREAFTER REDUCED TO TYPEWRITING BY ME OR
UNDER MY SUPERVISION; AND THE FOREGOING PAGES
CONTAIN A FULL AND CORRECT TRANSCRIPTION OF ALL
THE TESTIMONY OF SAID WITNESS TO THE BEST OF MY
ABILITY AND UNDERSTANDING; THAT I AM NOT OF KIN
OR IN ANYWISE ASSOCIATED WITH ANY OF THE
PARTIES TO SAID CAUSE OF ACTION, OR THEIR
COUNSEL, AND THAT I AM NOT INTERESTED IN THE
EVENT THEREOF;

THAT THE ORIGINAL WAS PROVIDED TO TAKING
COUNSEL FOR THEIR CUSTODY AND CONTROL.

Betty C. Godso

BETTY C. GODSO, CSR # 87189



Accu-Tech Court Reporters
P.O. Box 45212, #446
Baton Rouge, LA 70895
225-665-1270 Fax 225-665-9059
Email- accutech@eatel.net

November 15, 2000

Mr. Charles F. Gay, Jr.
Attorney at Law
Adams and Reese, LLP
4500 One Shell Square
New Orleans, LA 70139

RE: Scott v. American Tobacco, et al

Dear Mr. Gay:

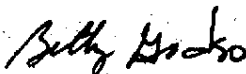
Reading and Signing was not waived by Mr. Frank Gullotta.

Please have him read the transcript, make any changes he feels necessary, and return the Witness Certificate along with the Errata Sheet(s).

Please keep a copy for your transcript, and please remind the deponent not to write on the transcript itself, but to make any changes on the Errata Sheet.

Upon receipt, we will forward to other counsel in this matter.

Very truly yours,



Betty C. Godso, CCR, RPR

INSTRUCTION SHEET FOR READ AND SIGN

THE ENCLOSED ERRATA SHEET IS FOR YOUR USE IN NOTING ANY INSTANCES YOU FEEL THE COURT REPORTER MISHEARD, MISUNDERSTOOD OR MISSPELLED WHAT YOU SAID IN YOUR DEPOSITION. IF YOU HAVE ANY QUESTIONS REGARDING A CHANGE YOU WISH TO MAKE, PLEASE CONSULT WITH YOUR ATTORNEY.

YOU SHOULD NOT BE CONCERNED WITH CHANGING MINOR SPELLINGS AND/OR PUNCTUATION UNLESS YOU FEEL IT AFFECTS THE MEANING OF YOUR TESTIMONY. IF YOU NEED TO CORRECT A SPELLING, IT IS ONLY NECESSARY TO DO IT ONCE, NOT EVERY TIME IT OCCURS IN THE TRANSCRIPT. YOU SHOULD NOT MAKE CORRECTIONS TO THE SPOKEN WORD OF ANYONE BUT YOURSELF. YOU SHOULD NOT EXPECT A TYPED, VERBATIM TRANSCRIPT TO READ SMOOTHLY AS A CAREFULLY WORDED LETTER, REPORT, OR MANUSCRIPT.

MOST RULES OF PROCEDURE REQUIRE THE SIGNED WITNESS' CERTIFICATE TO BE RETURNED WITHIN 30 DAYS. CHECK WITH YOUR ATTORNEY, OR THE ATTORNEY WHO REQUESTED YOU READ AND SIGN IF YOU HAVE QUESTIONS.

IF THERE ARE NO CHANGES, PLEASE RETURN ONLY THE SIGNED WITNESS' CERTIFICATE.

Produced by RJRTC

WITNESS' CERTIFICATE

I HAVE READ OR HAVE HAD THE FOREGOING
TESTIMONY READ TO ME AND HEREBY CERTIFY THAT IT IS A TRUE
AND CORRECT TRANSCRIPTION OF MY TESTIMONY WITH THE
EXCEPTION OF ANY ATTACHED CORRECTIONS OR CHANGES.

WITNESS SIGNATURE DATE

Frank Guilotto

PLEASE INDICATE

() NO CORRECTIONS

() CORRECTIONS, ERRATA SHEET ENCLOSED

Return to your attorney or:

Accu-Tech Reporters; P.O.Box 45212; Baton Rouge, LA 70895

ERRATA SHEET

PAGE LINE

CHANGE

TO

produced by RJRT

in HUMPHREY

Please return the signed Witness Certificate along with any changes either to the attorney who has requested that you read and sign or to: Accu-Tech Court Reporters; P.O. Box 45212, #446, Baton Rouge, LA 70895.

52299 8355

CIVIL DISTRICT COURT FOR THE PARISH OF ORLEANS

STATE OF LOUISIANA

EXHIBIT

Gullotta #1
ALL-STATE INTERNATIONAL

NO. 96-8461

DIVISION "K"

DOCKET NO.

GLORIA SCOTT and DEANIA M. JACKSON,
on behalf of themselves and all others similarly situated

Versus

THE AMERICAN TOBACCO COMPANY, INC., et al

FILED: _____

DEPUTY CLERK

**NOTICE OF VIDEO DEPOSITION OF FRANK GULLOTTA
FOR DISCOVERY PURPOSES AND/OR FOR USE AT TRIAL**

To: Frank Gullotta
Through his attorney of record:
Scott E. Delacroix, Esq.
Adams & Reese
One Shell Square, Suite 4500
New Orleans, Louisiana 70139

And to: All Defendants
Through Liaison Counsel:
Scott E. Delacroix, Esq.
Adams & Reese
One Shell Square, Suite 4500
New Orleans, Louisiana 70139

Phillip A. Wittmann, Esq.
Stone Pigman
546 Carondelet Street
New Orleans, Louisiana 70130

Definitions and Instructions

- A. Document - As used herein, the term "document" shall be construed broadly and expansively to include any medium upon which information is recorded, including, but not limited to, writings, records, letters, correspondence, minutes, memoranda, notes, e-mails, Internet and World Wide Web information, photocopies, facsimiles, transcripts, graphs, contracts, agreements, applications, forms, photographs, videotapes, audiotapes, microfilm, charts, studies, tables, calculations, analyses, summaries, compilations, advertisements, fliers, mailings, brochures, binders, notebooks, manuals, notices, acknowledgments, forms, and any draft of the foregoing, which is, or has been, at any time, in the control, custody or possession of the deponent, Philip Morris, Inc., Philip Morris USA, Philip Morris Worldwide Scientific Affairs, and/or parties acting on behalf of Philip Morris, Inc., Philip Morris USA, and/or Philip Morris Worldwide Scientific Affairs, including, but not limited to, the deponent, and/or other employees, officers, managers, directors, parent corporations, predecessors-in-interest, subsidiaries, associates, experts, consultants, agents, public relations advisors, advertising agents or consultants or advisors, investigators, researchers, scientists, secretaries, assistants, or attorneys.
- B. Philip Morris - Shall refer to Philip Morris, Inc., Philip Morris USA, Philip Morris Worldwide Scientific Affairs, and/or all parties acting on behalf of Philip Morris, Inc., Philip Morris USA, and/or Philip Morris Worldwide Scientific Affairs, including, but not limited

Produced by R. J. T. C.
in
HUMPHREY

to, employees, officers, managers, directors, parent corporations, predecessors-in-interest, subsidiaries, associates, experts, consultants, agents, public relations advisors, advertising agents or consultants or advisors, investigators, researchers, scientists, secretaries, assistants, or attorneys.

C. Defendant - Shall refer to each Defendant, and all parties acting on behalf of that Defendant, including, but not limited to, employees, officers, managers, directors, parent corporations, predecessors-in-interest, subsidiaries, associates, experts, consultants, agents, public relations advisors, advertising agents or consultants or advisors, investigators, researchers, scientists, secretaries, assistants, or attorneys.

D. Privilege - If a privilege is claimed over any document, (as "document" is defined above), please provide: (a) the identity of the author of the document, (b) the identity of the recipient of the document, (c) the date that the document was prepared, (d) a brief description of the document, and (e) the basis upon which the privilege is claimed, including the statute, rule or decision upon which the claim of privilege is based.

E. Relates - Shall be interpreted broadly and expansively, to include relating, referring, pertaining, evidencing, supporting, describing, mentioning, including, contradicting, or compromising.

F. The terms "and" and "or" and "and/or" shall be construed broadly and expansively as "and/or", and shall not be construed to limit the documents or information sought in any manner.

G. Depositions to be used for both discovery and trial purposes. These depositions are noticed for all purposes, including trial on the merits, and are to be video and audio depositions.

H. Video and audio depositions. These depositions are noticed for all purposes, including trial on the merits, and are to be video, audio, and transcribed depositions.

I. Disputes. All disputes and objections shall be brought to the Special Master or District Court Judge in Civil District Court, New Orleans, Louisiana, for resolution and ruling, and not to Judges in other venues or jurisdictions.

J. Conformity with Case Management Order. The depositions herein noticed shall be in conformity with the Court's Case Management Order. See Case Management Order No. 2, pages 6-9, Paragraph 16(c), (d), (attached as Exhibit "A").

DEPOSITION NOTICE

PLEASE TAKE NOTICE that, commencing on Thursday, November 9th, 2000, at 9:00 a.m. (EST), or as soon thereafter as practically possible, and continuing until concluded from day to day, at The Jefferson Hotel, located at 101 Franklin Street, in Richmond, Virginia, the Plaintiffs, Gloria Scott, Deanna Jackson, and a certified class of similarly situated individuals, will take the deposition upon oral examination of Frank Gulletta, pursuant to the Louisiana Code of Civil Procedure and Scott CMO2, before an officer duly authorized to administer oaths, and by videotape, for all purposes, including perpetuation and use at trial. You are invited to attend and to participate as you deem appropriate.

EXHIBIT

2
ALL-STATE INTERNATIONAL

CIVIL DISTRICT COURT FOR THE PARISH OF ORLEANS
STATE OF LOUISIANA

NO. 98-8461

DIVISION "K"

GLORIA SCOTT, ET AL

VERSUS

THE AMERICAN TOBACCO COMPANY, INC., ET AL

CASE MANAGEMENT ORDER NO. 2 ("CMO 2")

This order governs these proceedings and remains in effect up to the signing of a superceding Case Management Order or the Pre-Trial Order by this Court. This order is final and no modifications to this order are permitted without written motion to the Court, and upon a showing of good cause.

1. Provisions Continued from Case Management Order No. 1

Paragraphs 17, 20, 21, 23, 24, 25, 26, 27, 28 and 30 of Case Management Order No. 1 shall remain in force and effect.

2. Dates

Any reference here to "days" shall refer to calendar days.

3. Stay of Discovery

The stay of discovery imposed in Paragraph 15 of Case Management Order No. 1 is hereby lifted. All discovery shall be conducted in strict accord with the provisions of this Order.

4. Rules Governing Proceedings

Except as otherwise provided in this Court's prior orders, in this order, or by further order of this court, the Louisiana Code of Civil Procedure and the Uniform Rules of the Civil District Court for the Parish of Orleans shall govern all further proceedings herein.

5. Transcripts

All hearings and status conferences in this matter, including those before the Special Master, shall be transcribed in the absence of agreement to the contrary by all parties. The cost of such transcription shall be divided equally between plaintiffs and

52299 8362

defendants.

6. Substantive Issues of Law

Nothing set forth in this Case Management Order shall be deemed to effect any substantive right, claim, or defense of any party to this matter or to constitute any ruling or order on any question of law.

7. Admission of Counsel

Any non-Louisiana attorney who wishes to appear *Pro Hac Vice* in this litigation and who has not previously moved for and obtained an order of admission can file and serve a Notice of Appearance *Pro Hac Vice*. The Notice shall indicate the Bars of all the States in which the attorney is a member in good standing. Upon filing and service of the Notice, the attorney shall be deemed admitted *Pro Hac Vice*. No further court order shall be required for such admission. Any non-Louisiana attorneys so admitted shall be subject to and governed by the Louisiana Rules of Professional Conduct.

8. Amendment of Pleadings

All amendments to pleadings related to the Phase I, II and III trials shall be filed on or before August 1, 2000. Defendants shall have thirty (30) days after service of such pleadings to file responsive pleadings.

9. Pending Exceptions and Motions

There currently are pending the following exceptions and motions:

- a. Declinatory Exception of Lack of Personal Jurisdiction of UST Inc.
- b. Declinatory Exception of Lack of Personal Jurisdiction of The Tobacco Institute, Inc.
- c. Exception of Lack of Personal Jurisdiction of BATUS Holdings, Inc. and BATUS, Inc.
- d. Declinatory Exception of Lack of Personal Jurisdiction of American Brands, Inc.
- e. Declinatory Exception of Lack of Personal Jurisdiction of RJR Nabisco, Inc.
- f. Exception of Lack of Personal Jurisdiction of Loews Corporation
- g. Exceptions incorporated in the Answer filed by R.J. Reynolds Tobacco

Company

- h. Exceptions incorporated in the answer filed by Phillip Morris Companies, Inc.
- i. Exceptions incorporated in the answer filed by Brown and Williamson Tobacco Corporation, individually and as successor by merger to the American Tobacco Company
- j. Motion of Brown and Williamson Tobacco Corporation, individually, and as successor by merger to The American Tobacco Company to strike Exhibit S.

As set forth in Paragraph 21 of Case Management Order No. 1, the failure of any defendant to fix such declinatory and/or disjunctive exceptions or other motions for hearing, and the participation by such defendants in other proceedings in this case, shall not constitute the waiver of any defendants' exceptions and shall be without prejudice to, and with full reservation of, all rights and remedies of such defendants relating to their jurisdictional and other exceptions. Notwithstanding the foregoing, any defendant may fix its exceptions and/or motions for hearing on any of the hearing dates identified in any Order of this Court, or subsequently identified by further order of this Court, as a hearing date for this matter, conditioned upon compliance with the filing and notice requirements set forth in this Case Management Order.

10. Filing of Motions and/or Fixing Pending Matters for Hearing

a. Scheduling Pending Matters for Hearing

Any defendant may fix its exceptions and/or motions for hearing on any of the dates identified by this Court as a hearing date in this matter. In order to fix a pending exception and/or motion for hearing, such defendant must notify plaintiffs of its intent to bring forth the exceptions and/or motion for hearing at least twenty-one (21) days prior to the scheduled hearing date. Any opposition to the exception and/or motion must be filed with the Court at least seven (7) days in advance of the hearing date. Any reply memorandum must be limited to the matters raised in the opposition and must be filed with the Court at least two (2) days in advance of the hearing date. No further briefing is

permitted.

b. Filing and Scheduling New Matters for Hearing

Except as otherwise set forth in this Order or a Pre-Trial Order, any party may file a motion and schedule it for hearing on one of the dates identified by this Court as a hearing date for this case, or subsequently identified by further order of this Court as a date for this matter. Except as otherwise set forth in this Case Management Order, such motion must be filed and scheduled for hearing at least twenty-one (21) days prior to the scheduled hearing date. Any opposition to the motion must be filed with the Court at least seven (7) days in advance of the hearing date. Any reply memorandum must be limited to matters raised in the opposition and must be filed with the Court at least two (2) days in advance of the hearing date. No further briefing is permitted excepted by leave of court for good cause shown.

All motions and memorandum must be served upon the Special Master at the time of service on the adverse party.

c. Dispositive Motions

All dispositive motions in this matter shall be filed in accordance with the deadlines set forth in this CMO. All such motions must be served on the Special Master at the time of service on the adverse parties.

11. Discovery Disputes

All discovery disputes are hereby referred to the Special Master for expedited hearing and resolution.

12. Discovery Requests and Responses

Pursuant to Louisiana Code of Civil Procedure Article 1474 and Local Rule 9, Section 3, discovery requests and responses shall not be filed with the Court except that they may be appended to a motion or opposition to which they are relevant or as otherwise authorized by the Louisiana Code of Civil Procedure.

13. Service of Discovery on the Special Master

Copies of all written discovery material shall be served on the Special Master.

14. Service

A courtesy copy of all pleadings, motions, briefs, or other documents filed or otherwise presented to the Court or the Special Master by plaintiffs shall be delivered by hand or by fax to defendants' liaison counsel and to local counsel for Brown & Williamson Tobacco Corporation, Lorillard Tobacco Company, The Tobacco Institute and United States Tobacco Company no later than 4:00 p.m. on the earliest date the pleading, motion, brief or other document is filed and presented. If the pleading, motion, brief or other document is to be submitted to the Court for action on the same day as filing or presentation, it must be delivered by hand or by fax before presentation to the Court.

Five courtesy copies of all pleadings, motions, briefs or other documents filed or otherwise presented to the Court or the Special Master by any defendant shall be delivered by hand or by fax to plaintiffs' liaison counsel no later than 4:00 p.m. on the earliest day the pleading, motion, brief or other document has been filed or presented. If the pleading, motion, brief or other document is to be submitted to the Court for action on the same day as filing for presentation, it must be delivered by hand or by fax, before presentation to the Court.

15. Class Notice and Notification Plan

Notice to the Class shall occur in accordance with the orders of this Court.

16. Phase I, II and III Trial Discovery

The stay of discovery is hereby lifted. Accordingly, discovery relating to the named plaintiffs' individual claims, class-wide claims and all the issues to be adjudicated in the Phase I, II and III trials, as set forth in this Court's Trial Order 1, including records collection, written discovery and depositions, shall be conducted according to the following schedule, which may be extended or modified only for good cause shown, upon contradictory hearing.

a.) Records Collection

If not previously provided, within twenty-one (21) days of entry of the CMO, named plaintiffs and class representatives shall execute and provide to Defendants' Liaison Counsel authorizations for the release of medical, prescription, psychiatric, employment, insurance, union and educational records and a verified list of all of their respective

produced by RJRTC
in

HUNTERFREY

treating physicians and of all medical facilities where they have received treatment, and shall cooperate so as to enable defendant to obtain such records expeditiously. One copy of all such medical, prescription, psychiatric, employment, insurance, union and educational records obtained by defendant shall be provided to Plaintiffs' Liaison Counsel within ten (10) days of receipt of such records by defendant.

b.) Written Discovery

- I. All written discovery (Interrogatories, Requests for Production and Requests for Admission) shall be served on the opposing party on any issue pertaining to the Phase I, II and III trials no later than forty-five (45) days from the date of entry of CMO2.
- II. Within thirty (30) days after the service of written discovery, all parties are to serve any objections and responses to written discovery. All answers shall be verified in accordance with the provisions of the Louisiana Code of Civil Procedure.
- III. Any motions relating to written discovery shall be filed in accordance with the provisions of CMO2 and shall be scheduled for hearing before the Special Master.

c.) Depositions of Fact Witnesses

- I. Depositions of fact witnesses, including class representatives, may be noticed immediately after the entry of CMO2. The parties shall confer with each other, third-party deponents and the Special Master (when feasible and appropriate) and attempt to agree on the scheduling of depositions as to time and place. Any party noticing a deposition shall give at least ten (10) days notice of the taking of the deposition unless a shorter period of time is agreed to by the parties or ordered by the Court or the Special Master for good cause shown.
- II. All depositions may be videotaped. Any party intending to videotape a deposition shall so state in a Notice of Deposition.
- III. *Attendance and Examination:* Unless otherwise agreed to by the parties or ordered by the Court or the Special Master, depositions

produced by RJRTC

in

HUMPHREY

may be attended only by the parties, the parties' experts and consultants, the deponents, the deponents' attorneys, attorneys representing any of the parties in this action, in-house counsel for the parties, the employees of such counsel, and court reporters. Plaintiffs and defendants, collectively, shall designate a lead counsel in conducting the examination of the deponent, but counsel for other parties may be permitted to conduct examination on non-duplicative matters.

iv.

Conduct at Depositions: Unless otherwise agreed by the parties, and noted on the record, the following stipulations shall apply to all depositions in this action:

- 1.) Unless otherwise specified by any defendant, an objection by a single defendant shall be deemed an objection by all defendants. However, unless otherwise specified, an instruction not to answer by one defendant should not be deemed an instruction not to answer by all defendants.
- 2.) All objections are reserved until trial or other use of the deposition, except those objections regarding the form of the question or the existence of a privilege.
- 3.) Counsel shall refrain from engaging in colloquy during depositions. The phrase "objection as to form" or similar language shall be sufficient to preserve all objections as to form until the deposition is sought to be used. If requested, the objecting party shall provide a sufficient explanation for the objection to allow the deposing party to rephrase the question.
- 4.) The counsel shall not direct or request that a witness refuse to answer a question, unless that counsel has objected to the question on the ground that the

question seeks privileged information, information that the Court has ordered may not be discovered, or a deponent seeks to present a motion to the Court for termination of the deposition on the grounds that it is being conducted in bad faith or in such a manner as unreasonably to annoy, embarrass, or press the party or the deponent. When a privilege is claimed, the witness shall nevertheless answer questions relevant to the existence, extent or waiver of the privilege, such as the date of a communication, who made the statement, to whom and in whose presence the statement was made, other persons to whom the contents of the statement was made, any other person to whom the contents of the statement has been disclosed, and the general subject matter of the communication.

- 5.) Counsel shall not make objections or statements which might suggest an answer to a witness.

4.) Use of Videotape Depositions

Parties should arrange to videotape the depositions of witnesses not expected to testify live at trial. Deposition designations presented in lieu of live testimony should be presented via edited video deposition presentations incorporating the Judge's rulings on objections, the offering party's designated testimony and the opposing parties counter-designations. In the event a video deposition is not available, parties may read selected deposition designations into the record.

17. Rulings: Immediate Presentation

Disputes arising during depositions that cannot be resolved by agreement and that, if not immediately resolved, will significantly disrupt the discovery schedule or require rescheduling of the deposition, shall be presented by telephone or in person to the Special Master. In the event the Special Master is not available, the deposition shall

continue with the issue of contention reserved until the Special Master is available. The presentation of the issue and the Special Master's ruling shall be recorded as part of the deposition.

18. Use of Castano Depositions

All depositions (including depositions of class representatives and fact and expert witnesses) and the entire discovery and testimonial record taken or developed in Castano, prior to the certification of the class on February 17, 1995, may be used in this action for any purpose as if the depositions had been taken and the record had been generated in this case.

19. Requirement to Confer

Counsel must confer at least seven (7) days prior to the filing of any motion to compel or other motion related to discovery. No party shall file a motion to compel or other motion relating to discovery unless certification is made in the record by counsel for the moving party that the parties conferred and a good faith attempt was made to resolve disputes arising from the responses to discovery.

20. Document Identification

Counsel shall develop and use a system for identifying, by unique number or symbol, each document produced or referred to during the course of this litigation.

21. Document Production

Within sixty (60) days after the entry of CMO2, the plaintiffs shall furnish the defendants with a preliminary list of documents which they believe to be relevant to the issues of the Phase I, II and III trials and a preliminary identification of documents they may introduce at each of the Phase trials, identifying the Phase trial at which the document may be offered. This list of documents shall contain the following categories of information (if said information is available):

- a. The defendant the document relates to;
- b. Any identifying or bates numbers contained on said document;
- c. The date of the document;
- d. The author of the document;
- e. The recipient of any document;

- f. A brief reference description of the contents of the document;
- g. An identification of the source of the document;
- h. Any other identifying numbers affixed to said document;

Within thirty (30) days after the receipt thereof, the defendants shall specify which documents defendants are unable to identify from plaintiffs' list and request copies of said documents from the plaintiffs. Plaintiffs shall furnish copies of such documents to the defendants on or before ten (10) days after receipt of such request.

Within sixty (60) days after the entry of CMO2, the defendants shall also furnish the plaintiffs with a preliminary list of documents which they believe to be relevant to the issues of the Phase I, II and III trials and a preliminary identification of documents they may introduce at each of the Phase trials identifying the Phase trial at which the document may be offered. This list of documents shall contain the following categories of information (if said information is available):

- a. The defendant the document relates to;
- b. Any identifying or Bates numbers contained on said document;
- c. The date of the document;
- d. The author of the document;
- e. The recipient of any document;
- f. A brief reference description of the contents of the document;
- g. An identification of the source of the document;
- h. Any other identifying numbers affixed to said document.

Within thirty (30) days after receipt of the defendants' list of documents, the plaintiffs shall specify which documents plaintiffs are unable to identify from defendants' list and request copies of said documents from defendants. Defendants shall furnish copies of such documents to the plaintiffs on or before ten (10) days after receipt of such request.

All parties shall make a continuing good faith effort to identify additional documents which may be used at trial and to supplement their listing of documents on a timely basis.

All documents shown on any supplemental listings shall be subject to the time limitations for identification and assertion of privilege set forth hereinabove.

produced by RJRTC
in

22. Privilege Logs

Within thirty (30) days after production of the lists of documents, the parties shall identify all documents which the parties assert are protected by any privilege and shall submit a privilege log to the Special Master and serve notice to the parties of any claim of privilege in the following manner:

- a. If any documents are withheld from production on the grounds of privilege or work product, the withholding party shall serve on the party requesting production, as part of the objection to production, a privilege log identifying each document withheld and specifying for each document its nature or type, its identification number, its date, its author(s), its addressee(s), the recipient(s) of copies, its subject matter and the basis for the assertion of privilege or work product.
- b. In lieu of preparing the privilege log required by subsection (a) above, the parties may, as to any set of documents which are both numerous and raise common privilege or work product issues, identify the documents for which a claim of privilege or work product is being made in a generic matter by category of document rather than on a document by document basis, provided that the description of each category is sufficient to permit the claim of privilege or work product to be evaluated by the opposing party, the Special Master and the Court.
- c. The privilege log shall also be submitted as part of any responses or objections to interrogatories or document requests in which a privilege is asserted.

All motions arising from disputes related to the discovery of documents and privilege issues are hereby referred to the Special Master for expedited hearing and prompt recommendations to the Court for action.

23. Completion of Merits Discovery of Fact Witnesses

All merits discovery of fact witnesses pertaining to issues in the Phase I, II and III trials shall be completed sixty (60) days before the commencement of the Phase I trial.

24. Expert Witness Identification and Discovery

- a. Within ninety (90) days from the entry of this CMO, plaintiffs shall serve on defendants a list of expert witnesses they may call at each of the Phase trials, identifying the Phase trial at which the expert is expected to testify. Fifteen (15) days thereafter, the plaintiffs shall serve on the defendants a written report prepared and signed by the witness, which report shall include:

- i.) A complete statement of all opinions to be expressed and the basis and reasons therefore;
- ii.) The data or other information considered by the witness in forming the opinions;
- iii.) Any exhibits to be used as a summary of or in support of the opinions;
- iv.) The qualifications of the witness, including list of all publications authored by the witness within the preceding ten (10) years;
- v.) The compensation to be paid for the study and testimony;
- vi.) A listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four (4) years.

- b. Within one hundred twenty (120) days from the entry of this CMO, defendants shall serve on plaintiffs a list of expert witnesses they may call at each of the Phase trials, identifying the Phase trial at which the expert is expected to testify. Fifteen (15) days thereafter, the defendants shall serve on the plaintiffs a written report prepared and signed by the witness, which report shall include:

- i.) A complete statement of all opinions to be expressed and the basis and reasons therefore;
- ii.) The data or other information considered by the witness in forming the opinions;

- iii.) Any exhibits to be used as a summary of or in support of the opinions;
- iv.) The qualifications of the witness, including list of all publications authored by the witness within the preceding ten (10) years;
- v.) The compensation to be paid for the study and testimony;
- vi.) A listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four (4) years.

Failure to comply with the report requirements may result in exclusion of the expert's testimony at trial.

Depositions of expert witnesses may be noticed ten (10) days after the exchange of reports is completed and shall be completed at least seventy-five (75) days before the date of the commencement of the Phase I trial. All depositions of expert witnesses shall be conducted in accordance with the provisions set forth in Paragraphs 16(b) and 17 above.

25. Discovery of Absent Class Members

The time period for discovery of absent class members will be set by the Court after it determines the identities of those individuals who will pursue their claims against defendants in this suit.

26. Procedural and Other Motions

The Court has established a regular monthly motion day to hear motions in Trial Order 1.

27. Dispositive Motions

Any dispositive motions, including summary judgment motions, must be filed no later than ten (10) days after the close of expert discovery. All such motions shall be heard on December 6, 2000.

28. Daubert/Forst Motions and Motions in Limine

All Daubert/Forst motions and motions in limine must be filed no later than ten (10) days after the close of expert discovery. All such motions shall be heard on

December 6, 2000.

29. Preliminary and Final Witness and Exhibit Lists

- a. Plaintiffs shall file and serve a preliminary list of witnesses sixty (60) days after entry of CMO2 and a final list of witnesses and a final exhibit list no later than one hundred twenty (120) days before the commencement of Phase I trial.
- b. Defendants shall file and serve a preliminary list of witnesses ninety (90) days after entry of CMO2 and a final list of witnesses and a final exhibit list no later than one hundred twenty (120) days before the commencement of the Phase I trial.

- c. **Presentation of Testimonial, Demonstrative and Real Evidence:** Upon submission of final pre-trial exhibit lists, parties shall submit to the Court DC-ROM's containing images of the listed exhibits in standard Group IV TIFF format.

In an effort to speed the admission and display of evidence, the parties shall share a single multimedia presentation network consisting of a series of monitors and projection screens throughout the courtroom for the presentation of documents, demonstrative aids and video during the trial.

This network shall be for computer signal and video signal display only and shall not require the parties to share a computer or data files.

30. Completion of Discovery

All discovery must be completed seventy-five (75) days before the commencement of the Phase I trial.

31. Verdict Forms, Jury Interrogatories and Jury Instructions

All parties shall submit to the Court and Special Master and serve upon liaison counsel proposed verdict forms, special jury interrogatories and proposed jury instructions for Phase I, II and III trials no later than seventy-five (75) days before the commencement of the Phase I trial. Objections to all such submissions shall be made in writing no later than sixty (60) days before the commencement of the Phase I trial.

produced by RJRTC

in

HUMPHREY

32. Written Objections to Exhibits

All objections to the admissibility of all exhibits to be offered shall be filed no later than December 8, 2000.

33. Pre-Trial Order

The final Pre-trial Order shall be signed by all parties, filed with the Court and served on the Special Master no later than December 8, 2000.

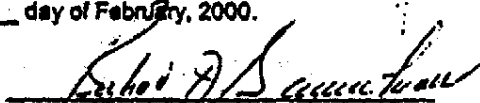
34. Pre-Trial Conference

The final Pre-Trial Conference is set for December 13, 2000 at 10:00 a.m.

35. Confering with the Special Master

Any party may, upon reasonable notice, request the Special Master to meet and confer with the parties on any matter covered by this order. Ex parte conferences with the Special Master are prohibited.

New Orleans, Louisiana, this 24th day of February, 2000.


Richard J. Ganucheau
JUDGE, Division "K"

CIVIL DISTRICT COURT FOR THE PARISH OF ORLEANS

STATE OF LOUISIANA

NO. 96-8461

DIVISION "K"

GLORIA SCOTT, ET AL

VERSUS

THE AMERICAN TOBACCO COMPANY, INC., ET AL

JUDGMENT

These matters came up for hearing on the 20th day of December, 1999:

1. Plaintiffs' Motion for Reconsideration of the Court's September 14, 1999 Order Requiring Television and Additional Print Notice;
2. Plaintiffs' Objections to Defendants' Notice Plan and Form of Notice;
3. Plaintiffs' Objections to Defendants' Proposed Trial Plan and Trial Issues;
4. Defendants' Objections to Plaintiffs' Notice Plan and Form of Notice;
5. Defendants' Motion for Notice Plan and Form of Notice; and
6. Defendants' Objections to the Plaintiffs' Proposed Trial Plan and Trial Issues.

After considering the Memoranda, applicable law and argument of counsel:

IT IS ORDERED that the Plaintiffs' Motion for Reconsideration of the Court's September 14, 1999 Order Requiring Television and Additional Print Notice, the Plaintiffs' Objections to Defendants' Notice Plan and Form of Notice, the Defendants' Objections to Plaintiffs' Notice Plan and Form of Notice, and the Defendants' Motion for Notice and Plan and Form of Notice are GRANTED in part and DENIED in part. The Court adopts its September 14, 1999 Order with the following modifications:

- a) The print notices published in the daily and weekly newspapers and in the publications referenced in the original Order, shall be 1/4 page in size;
- b) Standard fonts and font sizes shall be used in the print notice;
- c) Color fonts and color borders are not to be used;
- d) A standard 1 point black border shall be used to distinguish the print notice;
- e) No coupons are permitted in the print notice;
- f) The print notice shall be published in Sunday editions of the listed newspapers

produced by RJRTC
in

two times over a 30-day period;

- g) The print notice shall be published in daily editions of the newspapers listed four times over a 30-day period;
- h) The print notice shall be published one time in the weekly publications listed;
- i) The print notice shall be published one time in the magazine publications listed;
- j) The first print notice shall be published no later than sixty (60) days after the entry of this Judgment in the newspapers and the magazines listed in the Order of September 14, 1999;
- k) The print notice shall contain a toll-free number which will provide tape recorded information in response to inquiries from class members; such information shall include the class definition, opt-out rights and the opt-out period, the name and telephone number of the Special Master and the address to which class members send their opt-out notices;
- l) The print notice shall reference a World Wide Website address, which shall contain the print notice, the name and telephone number of the Special Master, the toll-free telephone number, opt-out rights and the opt-out period and the address to which class members send their opt-out notices;
- m) The opt-out period is forty-five (45) days, such period to begin from the scheduled publication date of the last print notice in any publication. Opt-outs are to be instructed to write to the address listed in the notice or the *Scott v. American Tobacco* Special Master, Dominic J. Glanna, , 201 St. Charles Avenue, 31st Floor, New Orleans, LA 70170-3100;
- n) The print notice shall be published in English and Spanish in any Hispanic publication. All inquiries in the Spanish language shall be referred to the Special Master, who will refer the inquiries to Mr. Raul Bencomo for translation;
- o) The broadcast television notices ordered by this Court's September 14, 1999 Order are to be broadcast in the "average prime times" (Option 2) referenced in the October 28, 1998 Affidavit of Peter Hillsbee and the broadcast of such notice shall begin no later than sixty (60) days after entry of this Judgment. The notice must contain a brief narrative of the class definition, the toll free

produced by RJRTC
in
HUMPHREY

NUMBER CONTROL PAGE
BATES NUMBER
NOT USED

522998379

number, the World Wide Website address, the name and telephone number of the Special Master, a brief description of the class member opt-out rights and the opt-out date;

p) All notices must make clear that this action seeks to establish a fund for medical monitoring/cessation of smoking, that damages for personal injury will not be awarded, that the purpose of medical monitoring is to detect latent disease or injury and not treat it, that the class representatives are not seeking direct monetary sums, and must not suggest that class members are either entitled to monetary damages or that they will receive money for medical monitoring or cessation of smoking programs;

q) All notices must inform class members that the relief sought is a medical monitoring program which will require class members to undergo tests over some period of time and cessation of smoking programs which may require participation in medically supervised programs designed to stop them from smoking;

r) All notices must inform class members that the defendants deny all allegations of wrongdoing and liability for all damages, and claim that participation in this class action may bar monetary claims for current personal injuries;

s) All notices shall direct inquiries to the *Scott v. American Tobacco* Special Master, Dominic J. Gianna, Middleberg, Riddle & Gianna, at (504) 207-7307, 201 St. Charles Avenue, 31st Floor, New Orleans, Louisiana 70170-3100;

t) All notices must inform class members not to call the Court or the Clerk of Court;

u) Registration forms are not required at this time;

v) The content and form of the print notice, the press releases, the courthouse communications, the television notice, the internet communication and the tape-recorded information available on the toll-free number must be submitted to the Special Master and the Court at least twenty-one (21) days before publication/dissemination.


produced by RJRT

in

HUMPHREY

IT IS FURTHER ORDERED THAT Plaintiffs Objections to Defendants' Proposed Trial Plan and Trial Issues and Defendants' Objections to Plaintiffs' Proposed Trial Plan and Trial Issues, are DENIED in part and GRANTED in part. The Court issues Trial Order No. 1 and Case Management Order No. 2, attached, as the Trial and Pre-Trial Plans that will govern the proceedings in this matter.

JUDGMENT READ, RENDERED AND SIGNED in New Orleans, Louisiana, this
24th day of February, 2000.


Richard J. Genocchio
JUDGE, Division "K"

CIVIL DISTRICT COURT FOR THE PARISH OF ORLEANS
STATE OF LOUISIANA

NO. 96-8481

DIVISION "C"

GLORIA SCOTT, ET AL

VERSUS

THE AMERICAN TOBACCO COMPANY, INC., ET AL

TRIAL ORDER 1

On September 14, 1999, this Court ordered the parties to submit to the Court and to the Special Master their proposed Trial Plans and objections to those Trial Plans. On December 20, 1999, the Court heard oral argument on this matter.

After considering the Trial Plans proposed by the parties, the objections to those Plans, the memoranda submitted by the parties, the argument of counsel, and the Louisiana Code of Civil Procedure Article 593.1 (1984), the Court concludes that this matter shall be managed in accordance with La. C.C.P. Art. 593.1 (C)(1984). The trial of this matter shall be conducted in phases. Consequently,

IT IS ORDERED that the Phase I trial of this matter commence on the 15th day of January, 2001. The Phase I trial shall adjudicate the liability of the defendants for all damages common to the class certified by the Court on April 16, 1997. The issues in the Phase I trial relating to liability for all damages will be fault and causation, namely, whether the defendants are legally liable for damages that are alleged to be common to the class. The issues include, but are not necessarily limited to, (1) whether the class representatives smoked; (2) whether nicotine in the defendants' products caused the class representatives to smoke; (3) whether the defendants' products were defective in relation to nicotine and addiction as a matter of Louisiana law; and (4) whether the addiction of the class representatives to nicotine caused conditions or effects that justify medical monitoring or other class-wide remedies or damages, such as smoking cessation remedies, for which the defendants are legally responsible.

The Phase II trial, before the same jury, shall commence 14 days after the completion of the Phase I trial and shall, pursuant to La. C.C.P. Art. 593.1 (C)(2) determine any items of damage common to the class and the basis for the assessment of those damages, e.g., whether the class is entitled to compensation for medical monitoring

produced by RJRTC

and/or smoking cessation, and, if so, the bases for assessing those damages on a class-wide basis.

The Phase III trial, before the same jury, shall commence 14 days after the completion of the Phase II trial, and shall, pursuant to La. C.C.P. Art. 593.1 (C)(3), assess the common damages determined in the Phase II trial. On the basis of the criteria or standards established by the Phase II trial for assessing common or class damages to the members of the class, the Phase III trial will assess, or award, the common damages. The Court will sign a judgment, pursuant to La. C.C.P. Art. 593 (D), upon the completion of the Phase III trial, and designate the said judgment as appealable pursuant to La. C.C.P. Art. 1915, as amended.

Subsequent trials will be set to determine and assess individual damages not common to the class in accordance with La. C.C.P. Art. 593.1 (C)(4)(1984).

The Court adopts Case Management Order No. 2 attached. Such order shall control the progress of all pre-trial proceedings. The provisions of Case Management Order No. 2 shall be followed strictly and are not subject to change by agreement of counsel without the permission of the Court.

All discovery disputes are hereby referred to the Special Master, as set forth in Case Management Order No. 2. The Special Master, who will conduct hearings and conferences, will make arrangements for the stenographic recording of all such hearings and conferences. The Special Master shall hear all discovery disputes expeditiously and shall file his report and recommendations as soon as is practicable after each hearing or conference.

The Court sets the following special hearing dates for all matters connected with this case. All hearings will be at 10:00 a.m.:

March 22, 2000	August 16, 2000
April 24, 2000	September 28, 2000
May 24, 2000	October 26, 2000
June 28, 2000	November 22, 2000
July 18, 2000	December 8, 2000

The Court shall issue a formal Pre-Trial Order form as a guideline for the confecton of a final joint Pre-Trial Order which will control the trial of this case. The Pre-Trial Order shall be filed in the record ten (10) days before the final Pre-Trial Conference.

The final Pre-Trial Conference is set for Thursday, December 13, 2000 at 10:00 a.m.

New Orleans, Louisiana, this 24th day of February, 2000.

HUMPHREY

in

produced by RJRTC

Richard J. Gansseau
JUDGE, Division 10

820 O'Keefe Avenue
New Orleans, Louisiana 70113
Telephone: (504) 581-4892
Fax No. (504) 561-6024

CERTIFICATE OF SERVICE

I hereby certify that the above and foregoing Notice has been served upon deponent, who is a current Philip Morris employee and/or has been listed as a fact and/or expert witness by Philip Morris, through defendant's counsel of record, Scott Delacroix, by hand, and upon Defense Liaison Counsel and the Special Master, by placing a copy of same in the U.S. Mail, properly addressed and postage pre-paid, this 15th day of September, 2000.


RUSS M. HERMAN

- 23 Aug.94

Page 1

Curriculum Vitae
Frank Paul Gullotta

**PERSONAL DATA**

Date and Place of Birth:

[DELETED] 1942 - Rockford, Illinois

Marital Status:

Married

Home Address:

[DELETED]

Telephone:

[DELETED]

Professional Address:

Philip Morris, USA
RD&E - Worldwide Scientific Affairs
4201 Commerce Road
Richmond, Virginia 23234
USA

Telephone:

(804) 274-5894

EDUCATION

University of New Mexico, 1970-1976

Ph.D., December, 1976 - Experimental Psychology

Major area of emphasis:

Physiological Psychology

Minor areas of emphasis:

Psychology of Learning, Comparative Psychology

Collateral area of study:

Medical Science

California State University, Los Angeles, 1968-1970

B.A. 1970 (Psychology)

Los Angeles City College, 1965-1968

APPOINTMENT

Affiliate Assistant Clinical Professor in the Department of Psychology, College of Humanities and Sciences, Virginia Commonwealth University, Richmond, VA.

PROFESSIONAL AFFILIATIONS

Member, International Brain Research Organization

→ neuroanatomy/neuro-physiology

52299 8386

- 23 Aug 94

Member, Association for Chemoreception Science

Member, Society for Neurosciences

Member, Society for Psychophysiological Research

Page 2

→ Taste & smell Organization

204000

Florida Industrial Liaison

Wash D.C.

Gmcl
1977Gmcl
1977

produced by R. J. P. T.

in

HUMPHREY

23 Aug.94

Page 3

RELEVANT WORK EXPERIENCE

Senior Research Scientist, Worldwide Scientific Affairs (1999-present)

Research Scientist, Worldwide Scientific Affairs (1995-1999)

Manager, Sensory Physiology, INBIFO Institut für biologischer Forschung (1992-1995)

Chair, Executive Liaison Committee, Association for Chemoreception Science (1991-1993)

Adjunct Assistant Professor, Department of Psychology, Virginia Commonwealth University (1991-1992)

Research Assistant Professor, Department of Psychology, Virginia Commonwealth University (1991-1992)

Project Leader, Electrophysiological Studies, Biochemical Research Division, Philip Morris Research Center, Richmond, VA (1982-1992)

Consultant, Flavor Development Division, Philip Morris Research Center, Richmond, VA (1988-1992)

Consultant, Product Evaluation Division, Philip Morris Research Center, Richmond, VA (1988-1992)

Research Scientist, Behavioral Research, Philip Morris Research Center, Richmond, VA (1977-1982)

Visiting Assistant Professor, Department of Psychology, State University of New York at Albany (1978-1977)

Research Assistant to Frank A. Logan, Department of Psychology, University of New Mexico (1975-1976)

Research Assistant to Dennis M. Feeney, Department of Psychology, University of New Mexico (1974-1975)

Assistant Director, Animal Vivarium, Department of Psychology, California State University Los Angeles (1969-1970)

TEACHING EXPERIENCE

Assistant Professor, Sensation and Perception (graduate and undergraduate), Virginia Commonwealth University (1991-1992)

Assistant Professor, Seminar in Clinical Neuropsychology, Psychology of Perception, Introductory Psychology, State University of New York at Albany (1976-1977)

Instructor, Introductory Psychology, University of New Mexico (1974)

52299 8388

23 Aug.94

Page 4

Graduate Assistant, Laboratory in Advanced Physiological Psychology, University of New Mexico (1973, 1975)

Graduate Assistant, Laboratory in Comparative Psychology, University of New Mexico (1971)

Graduate Assistant, General Psychology / Laboratory, University of New Mexico (1970-1974)

PUBLICATIONS AND PAPERS

PK ✓ Gullotta, F., Kuhn, M., von Holt, K., Heintze, G. The Electrophysiological and Subjective Effects of Smoking Cigarettes with Equal Tar but Different Nicotine Levels (manuscript in preparation)

PR ✓ Feeney, D.M., Gullotta, F.P., Gilmore, W. Hyposexuality Produced by Temporal-lobe Epilepsy in the Cat. *Epilepsia*, 39 (2), 00140-00149, 1998

Gullotta, F. The Auditory System. *Audio Alternatives*, 1 (3), 69-71, 1981

Gullotta, F. Don't let your psyche take you to the cleaners. *Audio Alternatives*, 1 (2), 77-79, 1980

Osborne, S., Gullotta, F., and Frankovitch, A. Digital application of an algorithm for peak identification in visual evoked potentials. *Psychophysiology* 17 (3), 329, 1980

Feeney, D.M., Gullotta, F.P., and Pittman, J.C. Slow-wave sleep and epilepsy: Rostral thalamus and basal forebrain lesions suppress spindles and seizures. *Experimental Neurology* 56, 212-225 (1977)

PK ✓ Feeney, D.M., Gullotta, F.P., and Gilmore, W. Effects of experimental epilepsy on the sexual behavior of cats. *Neuroscience Abstracts* 2 (1), 216 (1976)

PK ✓ Gullotta, F.P., Feeney, D.M., and Gilmore, W. Experimental analysis of sexual behavior in temporal lobe epilepsy. Paper presented at 23rd Annual Convention, Southwestern Psychological Association, 1978 (Albuquerque, New Mexico).

Feeney, D.M., Gullotta, F.P., and Wagner, H.R. Interrelationship between slow-wave and experimental epilepsy. Paper presented at 2nd International Congress of Sleep Research, 1975 (Edinburgh, Scotland).

Wagner, H.R., Feeney, D.M., Gullotta, F.P., and Cote, I.L. Inhibition of cortical epileptiform activity by generalized and localized ECoG desynchronization. *Electroencephalography and Clinical Neurophysiology* 39, 499-506 (1975)

Feeney, D.M. and Gullotta, F.P. Suppression of seizure discharges and sleep spindles by lesions of the rostral thalamus. *Brain Research* 45, 254-259 (1972).

PK ✓ Fitzpatrick, D. and Gullotta, F.P., The use of canine plasma protein solution in the laboratory rat. *Behavioral Methods Research Instrumentation* 2 (5), 259-260 (1970).

 PHILIP MORRIS INTERNATIONAL

EXHIBIT

4

ALL-STATE INTERNATIONAL

■ About Us

■ Issues

Youth Smoking Prevention

Cigarette Marketing Practices

Health Issues

Quitting Smoking

□ Ingredients in Cigarettes

Understanding Tar and Nicotine Numbers

Secondhand Smoke

WHO Framework Convention on Tobacco Control

■ Financial Overview

■ Corporate Responsibility

■ Our People

■ Site Map

ISSUES

What's In Philip Morris Brands Sold In Austr

Philip Morris Limited
Australia Ingredients Report
Composite List of Ingredients Added to Tobacco
As at January 1, 2000

There is no such thing as a "safe" cigarette and we are not pointing out ingredients that are used in or occur in food in order to imply "safety" with respect to cigarettes. We just want our consumers to know that these ingredients are general ingredients that are added to food products.

Prefix	INGREDIENT	QUANTITY NOT EXCEEDED (% in cig.)	FUNCTION	USES/NATURAL
	ACETANISOLE	0.0001	Flavor	Occurs in orange, peppermint, hard candies.
	ACETIC ACID	0.0010	Flavor	Occurs in bar cheese, blue, relishes.
	ACETOIN	0.0001	Flavor	Occurs in apple, black currant, brussels sprouts, goods.
	ACETOPHENONE	0.0001	Flavor	Occurs in apple, cauliflower, u.
	ACETYLPIRAZINE	0.0001	Flavor	Occurs in almond, white, potato chips.
	2-ACETHYLTHIAZOLE	0.0001	Flavor	Occurs in beer, asparagus, beverages, candy, chewing gum.
	AMMONIUM HYDROXIDE	0.2500	Flavor Processing Aid	Used as a leavening agent.
	BENZALDEHYDE	0.0001	Flavor	Occurs in artichoke, asparagus, goods, chewing gum.
	BENZON, RESINOID	0.0001	Flavor	Used in baked goods, chewing gum.
	BENZYL ALCOHOL	0.0500	Flavor	Occurs in apple juice, asparagus, blackberries, baked goods.
	BENZYL BENZOATE	0.0001	Flavor	Occurs in butter, guava, ice cream, baked goods.
	BENZYL BUTYRATE	0.0001	Flavor	Occurs in apple, banana, pear, mango, melon, papaya; used in baked goods.
	BERGAMOT OIL	0.0010	Flavor	Occurs in bergamot, orange, lemon, lime, grapefruit, mandarin, tangerine, yuzu.

produced by RJR

in

HUMPHREY

produced by RJRTC

in

HUMPHREY

	BORNYL ACETATE	0.0001	Flavor	Beverages, ic candy gum, beverag
	BUTYL ALCOHOL	0.0100	Flavor	Occurs in car fruit, pectack sauces, black puddings, cal
	BUTYL BUTYRATE	0.0001	Flavor	Occurs in app cheese, peac beverages, ic baked goods
	3-BUTYLIDENEPTHALIDE	0.0001	Flavor	Occurs in bet parmesan ch mustard, i candy
	BUTYRIC ACID	0.0001	Flavor	Occurs in oyl sauces, condit Occurs in app wheat bread, snack foods
	CAMPHENE	0.0001	Flavor	Occurs in car apple, black kivi fruit, use cream
	CARDAMOM SEED OIL	0.0001	Flavor	Occurs in car pickles
	CAROB BEAN & EXTRACT	0.1000	Flavor	Occurs in car goods, candy toppings
	CARROT OIL	0.0001	Flavor	Occurs in car
BETA-CARYOPHYLLENE		0.0001	Flavor	Occurs in car
	CASTOREUM EXTRACT	0.0001	Flavor	Used in bake chewing gum
	CELERY SEED OIL	0.0001	Flavor	Occurs in oyl baked goods
	CHAMOMILE FLOWER, ROMAN EXTRACT & OIL	0.0001	Flavor	Occurs in dr beverages, ic petals & pu
	CINNAMALDEHYDE	0.0010	Flavor	Occurs in bu cranberries, f ice cream
	CINNAMYL ALCOHOL	0.0001	Flavor	Occurs in bla cranberry, pu strawberry, w
	CINNAMYL ISOVALERATE	0.0001	Flavor	Occurs in dr gelatin & pud
	CITRAL	0.0001	Flavor	Occurs in gra juice, celery, kivi fruit, mar raspberry, us cream
	D,L-CITRONELLOL	0.0001	Flavor	Occurs in app blackberry, bl fruit, peach, i
	COCOA AND COCOA PRODUCTS	0.7500	Flavor	Occurs in oyl baked goods
	COFFEE EXTRACT	0.0001	Flavor	Occurs in oyl candy, syrup
	COGNAC, GREEN OIL	0.0001	Flavor	Used in ice c
	CORIANDER OIL	0.0001	Flavor	Occurs in car condiments
	SUGAR CORN SYRUP	1.8000	Flavor	Occurs in too baked goods
	PARA-CYMENE	0.0001	Humectant	
	GAMMA-DECALACTONE	0.0001	Flavor	Occurs in app cinnamon, car gum

	DECANAL	0.0001	Flavor	wheat bread, baked goods, apricot, artich used in baker candy.
	DECANOIC ACID	0.0001	Flavor	Occurs in apr blackberries, butter, used in
	DIACETYL	0.0001	Flavor	Occurs in apr avocado, blue cheese, wheat
	DIAMMONIUM PHOSPHATE	0.6000	Processing Aid	Used in dough puddings.
	2,3-DIETHYLPYRAZINE	0.0001	Flavor	Occurs in wh baked potato gelatin & pud
	DILL OIL	0.0001	Flavor	Occurs in dill, baked goods.
	PARA-DIMETHOXYBENZENE	0.0001	Flavor	Occurs in tea used in gelat cream, candy
	3,7-DIMETHYL-1,3,8-OCTATRIENE	0.0001	Flavor	Occurs in apr used in froze
	ETHYL ACETATE	0.0100	Flavor	Occurs in apr blue cheese, gum, beverage
	ETHYL BUTYRATE	0.0001	Flavor	Occurs in apr apricot, blue
	ETHYL HEPTANOATE	0.0001	Flavor	Occurs in car grapefruit jic papaya, pass chewing gum
	ETHYL HEXANOATE	0.0001	Flavor	Occurs in bar blackberry, b ice cream, c
	ETHYL ISOVALERATE	0.0001	Flavor	Occurs in bar cantaloupe, cheese; used
	ETHYL LACTATE	0.0001	Flavor	baked goods, Occurs in apr butter, caper
	ETHYL LAURATE	0.0001	Flavor	cream, baked Occurs in apr blackberry, w
	ETHYL MALTOL	0.0001	Flavor	baked goods, Occurs in apr soups, candy
	ETHYL NONANOATE	0.0001	Flavor	Occurs in apr bread, cocoa olive, peach,
	ETHYL PHENYLACETATE	0.0001	Flavor	beverages, le Occurs in apr bread, cantal
	ETHYL PROPIONATE	0.0010	Flavor	juice, guava, & puddings.
	ETHYL VANILLIN	0.0010	Flavor	Occurs in apr cantaloupe, c grape, guava cream.
	6-ETHYL-3-HYDROXY-4-METHYL-2 (5H)-FURANONE	0.0001	Flavor	Used in beve breakfast can
	2-ETHYL-3-METHYLPYRAZINE	0.0001	Flavor	Occurs in wh coconut, coff chewing gum
		0.0001	Flavor	Occurs in wh used in cano

Produced by RPTC
in
HUMPHRY

Ingredient	Concentration	Flavor	Occurrence
PENUGREEK EXTRACT	0.0100	Flavor	Occurs in pen gels, in pu
GERANIOL	0.0001	Flavor	Occurs in apr current, black candy, ice on
GERANIUM ROSE OIL	0.0001	Flavor	Occurs in ger in chewing g
GERANYL ACETATE	0.0001	Flavor	Occurs in cat chervil, ginge orange juice, used in baker
GERANYL BUTYRATE	0.0001	Flavor	Occurs in cat used in gelat candy
GERANYL FORMATE	0.0001	Flavor	Occurs in bla baked goods
GINGER OIL	0.0010	Flavor	Occurs in gin goods
GLYCEROL	2.5000	Humectant	Occurs in che baked goods
2,4-HEPTADIENAL	0.0001	Flavor	Occurs in avc wheat, brocc used in baker
2-HEPTANONE	0.0001	Flavor	Occurs in apr cheese, coco papaya, musc apricot, aspa wheat, butter, ice, baked g condiments
3-HEPTEN-2-ONE	0.0001	Flavor	Occurs in cat in gelatins & goods
HEXANOIC ACID	0.0001	Flavor	Occurs in apr blackberry, bl used in condi
3-HEXEN-1-OL	0.0001	Flavor	Occurs in apr grape, aprico honeydew m cream, candy
HEXEN-2-AL [2-HEXENAL]	0.0001	Flavor	Occurs in apr strawberry, g green tea; us goods, candy
HEXYL ACETATE	0.0001	Flavor	Occurs in apr currants, blac centalope, c baked goods
HEXYL PHENYLACETATE	0.0001	Flavor	Occurs in gra tea; used in h baked goods
HONEY	2.6000	Flavor	Common foo
4-HYDROXY-2,5-DIMETHYL-3(2H)-FURANONE	0.0001	Flavor	Occurs in ma frozen dairy p
SUGAR INVERT SUGAR	0.1000	Flavor	Occurs in suc goods, candy
IONONE [BETA-IONONE]	0.0001	Flavor	Occurs in car blackberry, bl used in cand
ALPHA-IONONE	0.0001	Flavor	Occurs in ras blackberry, c grapefruit juic plum; used in
ISOAMYL ACETATE	0.0001	Flavor	Occurs in apr blackberry, w chewing gum
ISOAMYL FORMATE	0.0010	Flavor	Occurs in apr tea, vinegar
ISOAMYL ISOVALERATE	0.0001	Flavor	Occurs in bar in frozen dair
ISOBUTYL PHENYL ACETATE	0.0001	Flavor	Occurs in bar

Produced by NRTC
in
HUMPHREY

ISOMIL PRENITALS	UNIT	NAME	Occurs in per goods, candy
ISOBUTYL ALCOHOL	0.0100	Flavor	Occurs in bla banana, bark candy, baked
ISOBUTYL CINNAMATE	0.0001	Flavor	Occurs in cof cream, baked
ISOBUTYRALDEHYDE	0.0001	Flavor	Occurs in apt blue cheese, gelatin & pud products.
ISOBUTYRIC ACID	0.0001	Flavor	Occurs in apt cheese, wheat cheddar, ches candy, gelatin
JASMINE ABSOLUTE	0.0001	Flavor	Occurs in jas goods, chewi
LAURIC ACID	0.0001	Flavor	Occurs in apt blackberry, w cashew nuts, ice cream.
LEMON OIL	0.0001	Flavor	Occurs in lert cereals, froze
LICORICE EXTRACT	0.0000	Flavor	Occurs in lic goods.
LIME OIL	0.0010	Flavor	Occurs in lert candy.
LINALOOL	0.0001	Flavor	Occurs in bar blueberries, s
LOVAGE EXTRACT	0.0100	Flavor	Used in swie
MALTOL	0.0010	Flavor	Occurs in bar bread, butter, peanut used baked goods.
MANDARIN OIL	0.0100	Flavor	Occurs in tan used in candi
L-MENTHOL	0.7500	Flavor	Occurs in per cooke, eggs, espartum; us
2-METHOXY-3-METHYLPYRAZINE	0.0001	Flavor	Occurs in bet candy, baked
PARA-METHOXYBENZALDEHYDE	0.0001	Flavor	Occurs in cof goods, candy
METHYL ANTHRANILATE	0.0001	Flavor	Occurs in cof strawberry, u frozen dairy f
METHYL LINOLEATE (48%) METHYL LINOLENATE (82%)	0.0001	Flavor	Occurs in bar melon, strawl baked goods.
METHYL PHENYLACETATE	0.0001	Flavor	Occurs in cof syrup, baker
6-METHYL-3,5-HEPTADIEN-2-ONE	0.0001	Flavor	Occurs in air bread, cashe
6-METHYL-5-HEPTEN-2-ONE	0.0001	Flavor	Occurs in gas candy, baked
4-METHYLACETOPHENONE	0.0010	Flavor	Occurs in cof in chewing g.
3-METHYLBUTYRALDEHYDE	0.0001	Flavor	Occurs in apt rice, blackber
2-METHYLBUTYRIC ACID	0.0001	Flavor	Occurs in apt blackberry, b used in ches
METHYLCYCLOPENTENOLONE	0.0001	Flavor	Occurs in sta breakfast cen
MIMOSA ABSOLUTE	0.0001	Flavor	Occurs in mlr dairy product
GAMMA-NONALACTONE	0.0001	Flavor	Occurs in wh used in candi
NUTMEG OIL	0.0001	Flavor	Occurs in nut baked goods

Produced by RJRTC
in
HUMPHREY

produced by RJRTC

in

HUMPHREY

	OCTANOIC ACID	0.0001	Flavor	Occurs in spy butter, blue d baked goods.
	OFOPOMAX OIL	0.0001	Flavor	Natural flavor
	ORANGE OIL, SWEET & BITTER	0.0100	Flavor	Occurs in ora cream, loas, l candy, gelatir
	ORRIS ROOT EXTRACT	0.0010	Flavor	Used in gelatir
	PARSLEY OIL	0.0001	Flavor	Occurs in par
OMEGA-	PENTADECOLACTONE	0.0001	Flavor	Used in bake
	PEPPERMINT OIL	0.0100	Flavor	Occurs in pep ice cream ball
ALPHA-	PHELLANDRENE	0.0001	Flavor	Occurs in spy paprika, parai milk products
	(2) PHENETHYL ACETATE	0.0001	Flavor	Occurs in spy bread, butter, cream, baker
	PHENETHYL ALCOHOL	0.0001	Flavor	Occurs in spy blueberry, ap chewing gum
	PHENETHYL BUTYRATE	0.0001	Flavor	Occurs in bat in baked goo
	PHENETHYL ISOBUTYRATE	0.0001	Flavor	Occurs in gra gum, baked f
	PHENYLACETALDEHYDE	0.0001	Flavor	Occurs in str goods, ice cr
	PHENYLACETIC ACID	0.0001	Flavor	Occurs in str confes, marsh sesame seed baked goods,
	PINE OIL, SCOTCH	0.0001	Flavor	Used in cand
ALPHA-	PINENE	0.0001	Flavor	Occurs in spy cheddar chee candy,
BETA-	PINENE	0.0001	Flavor	Occurs in spy carmets, color cranberry; us
	PIPERONAL	0.0010	Flavor	Occurs in car in candy, bak
	POTASSIUM SORBATE	0.0500	Preservative	Occurs in mo cheese.
	PROPENYLGUAETHOL	0.0001	Flavor	Used in swee
	PROPYL PARABEN (PROPYL PARA-HYDROXYBENZOATE)	0.0250	Preservative	Occurs in floz vegetables.
	PROPYLENE GLYCOL	2.5000	Humectant	Occurs in see conffection ftc
	3-PROPYLIDENEPTHALIDE	0.0001	Flavor	Occurs in lov products, bak
	PYRUVIC ACID	0.0001	Flavor	Occurs in wh milk, onion; u baked goods,
	RHODINOL	0.0001	Flavor	Occurs in per chewing gum
	ROSE OIL, BULGARIAN, TRUE	0.0001	Flavor	Occurs in rose cream, baker
	OTTO	0.0100	Flavor	Occurs in bat
	RUM	0.0001	Flavor	Occurs in bat
	SANDALWOOD OIL, YELLOW	0.0001	Flavor	Occurs in bat baked goods,
	SUGAR (SUCROSE)	2.5000	Flavor	Occurs in sug sources; used breakfast con
ALPHA-	TERPINEOL	0.0001	Humectant	
	PARATOLYL ISOBUTYRATE	0.0001	Flavor	Occurs in spy antichole, bat gum, baked f
4,2,3,5-TRIMETHYLOXYCLOHEX-1-ENYL		0.0001	Flavor	Used in bak

produced by RJRT
in
HUMPHREY

4-2,6,8-TRIMETHYLCYCLOHEXA-1,3-DIENYL BUT-3-EN-4-ONE	0.0001	Flavor	chewing gum Occurs in soft beverages, fir- candy, gelatin condiments.
2,3,5-TRIMETHYLPYRAZINE	0.0001	Flavor	Occurs in bar bread, cocoa, candy, dairy.
GAMMA-UNDECALACTONE	0.0001	Flavor	Occurs in soft plum, rose, wa- cream, baked
GAMMA-VALEROLACTONE	0.0001	Flavor	Occurs in co- peanut, whey baked goods.
VANILLA EXTRACT	0.0001	Flavor	Occurs in var- blackberry, bi- used in baker condiments.
VANILLIN	0.0100	Flavor	Occurs in soft blueberry, co- confection etc
PROCESSING AIDS: CARBON DIOXIDE		Processing Aids	
DENATURED ETHYL ALCOHOL AND ETHYL ALCOHOL			
WATER			

[Back to Australia Ingredients Home](#)

[Click here for](#)

[Home](#) | [Site Map](#) | [Site Policies](#)


PHILIP MORRIS INTERNATIONAL

- About Us
- Issues

Youth Smoking Prevention
Cigarette Marketing Practices

Health Issues

Quitting Smoking

- ☐ Ingredients in Cigarettes

Understanding Tar and Nicotine Numbers

Secondhand Smoke

WHO Framework Convention on Tobacco Control

- Financial Overview
- Corporate Responsibility
- Our People
- Site Map

produced by RJRT

in

HUMPHREY

ISSUES

What's In Philip Morris Brands Sold in Australia

Philip Morris Limited
Australia Ingredients Report
Composite List of Non-Tobacco Materials
As at January 1, 2000

Cigarette Paper

Ingredients	Quantity Not Exceeded
CELLULOSE	4.0
CALCIUM CARBONATE	2.0
POTASSIUM CITRATE	< 0.2
SODIUM CITRATE	< 0.2
GUAR GUM	< 0.2
DISODIUM PHOSPHATE	< 0.2
PROCESSING AIDS	

Sideseam Adhesive

Ingredients	Quantity Not Exceeded
ETHYLENE/VINYL ACETATE, COPOLYMER EMULSION IN WATER	0.10
WATER	0.10
POLYVINYL ACETATE	<0.02
POLYVINYL ALCOHOL	<0.01
VINYL ALCOHOL-VINYL ACETATE COPOLYMER	<0.01
DIBUTYL PHTHALATE	<0.01
BORIC ACID	<0.01
DEFOAMERS AND PRESERVATIVES	

Monogram Ink

Ingredients	Quantity Not Exceeded
ALKYD RESIN BASED ON VEGETABLE OILS	<0.001
PIGMENTS (RED 83:1, BLUE 15, YELLOW 13, RED 48:3, BLACK 7, BLUE 88)	<0.001
PHENOLIC MODIFIED ROSIN ESTER	<0.001
LINSEED OILS	<0.001
SOLID POLYMERIC ALUMINUM COMPOUND	<0.001
POLYETHYLENE	<0.001
SOYBEAN OIL	<0.001
SILICA AND ORGANOPHILIC CLAY	<0.001
2-ETHYLHEXYL DIPHENYL PHOSPHATE	<0.001
2,2,4-TRIMETHYL-1,3-PENTANEDIOL DIISOBUTYRATE	<0.001
GLYCEROL	<0.001
WHITE MINERAL OIL	<0.001
PETROLIUM DISTILLATES HYDROTREATED MINERAL	<0.001

52299 8397

PRESERVATIVES AND ANTIOXIDANTS

Filter Paper Inks

Ingredients	Quantity Not Exceeded
ETHYL, PROPYL, ISOPROPYL ACETATE	0.100
ETHYL (E100 EAS) AND ISOPROPYL ALCOHOL	<0.100
PIGMENTS (YELLOW 42, WHITE 8, WHITE 18, WHITE 19, RED 101, WHITE 20, BLUE 16, BLACK 11, YELLOW 17, YELLOW 63, BLACK 7, GREEN 7)	<0.100
NITROCELLULOSE	<0.050
IRON HYDROXIDE OXIDE	<0.050
TILACETIN	<0.050
PHTHALATE ESTERS	<0.050
COPPER, ALUMINUM AND ZINC	<0.010
2-ETHYLHEXYL DIPHENYL PHOSPHATE	<0.010
MALEIC RESIN	<0.001
POLYSTYRENE	<0.001
HYDROGENATED METHYL ESTERS OF RESIN AND ROSIN ACIDS	<0.001
AROMATIC HYDROCARBON RESIN	<0.001
SILICA AMORPHOUS GEL	<0.001
PARAFIN	<0.001
ACRYLIC COPOLYMER	<0.001
ALUMINUM HYDROXIDE	<0.001
POLYETHYLENE	<0.001
OCTADECANOIC ACID	<0.001
CELLULOSE ACETATE PROPIONATE	<0.001
ETHYL LACTATE	<0.001
GLYCERIDES, SOYA	<0.001

Filter Papers

Ingredients	Quantity Not Exceeded
CELLULOSE	2.7
CALCIUM CARBONATE	1.0
TITANIUM DIOXIDE	<0.6
ETHYLATED, CATIONIC AND ACID MODIFIED STARCHES	<0.3
PIGMENTS (YELLOW 42, BLACK 11, YELLOW 8, YELLOW 6, RED 101)	<0.3
POLYVINYL ALCOHOL	<0.2
WATER	<0.1
NITROCELLULOSE	<0.05
FUMARIC ACID	<0.05
BORIC ACID	<0.05
BORATED POLYVINYL ALCOHOL	<0.05
GLYOXAL	<0.05
DIBUTYL PHTHALATE	<0.05
TALC	<0.05
PROCESSING AIDS	

Filter Adhesives

Ingredients	Quantity Not Exceeded
ETHYLENEVINYL ACETATE, COPOLYMERS EMULSION IN WATER	0.6

produced by F. R. T. C.
in
HUMPHREY

produced by RJRT in HUMPHREY

POLYVINYL ACETATE	0.3
WATER	<0.10
DIPROPYLENE AND DIETHYLENE GLYCOL DIBENZOATES	<0.10
PARAFFIN	<0.10
MICROCRYSTALLINE WAX	<0.10
VINYL ALCOHOL-VINYL ACETATE COPOLYMER	<0.10
HYDROCARBON RESIN-ETHYLBENZENE, COPOLYMER WITH (1-METHYLETHENYL) BENZENE	<0.10
ALPHA METHYL STYRENE POLYMER	<0.10
TRIACETIN	<0.10
POLYVINYL ALCOHOL BORIC ACID	<0.10
POLYVINYL ALCOHOL	<0.10
POLYPROPYLENE GLYCOL	<0.10
DIBUTYL PHTHALATE	<0.10
CITRIC ACID	<0.10
DEFOMERS AND PRESERVATIVES	

Filtration Materials

Ingredients	Quantity Not Exceeded
CELLULOSE ACETATE	21.0
TRIACETIN	1.8
WATER	1.7
MINERAL OIL	<0.4
TITANIUM DIOXIDE	<0.2
ACETONE	<0.2
CARBON	<0.2
SORBITAN MONOLAUATE	<0.05
POLYOXYETHYLENE (20) SORBITAN MONOLAUATE	<0.05
ACETIC ACID	<0.01

[Back to Australia Ingredients Home](#)

[Click here for our policy reqs](#)

[Home](#) | [Site Map](#) | [Site Policies](#)

 PHILIP MORRIS INTERNATIONAL

☒ About Us

☒ Issues

Youth Smoking Prevention

Cigarette Marketing Practices

Health Issues

Quitting Smoking

☐ Ingredients in Cigarettes

Understanding Tar and Nicotine Numbers

Secondhand Smoke

WHO Framework Convention on Tobacco Control

☒ Financial Overview

☒ Corporate Responsibility

☒ Our People

☒ Site Map

ISSUES

What's In Philip Morris Brands Sold in Australia

Philip Morris Limited
Australia Ingredients Report
By-Brand Ingredients List
As at January 1, 2000

Notes

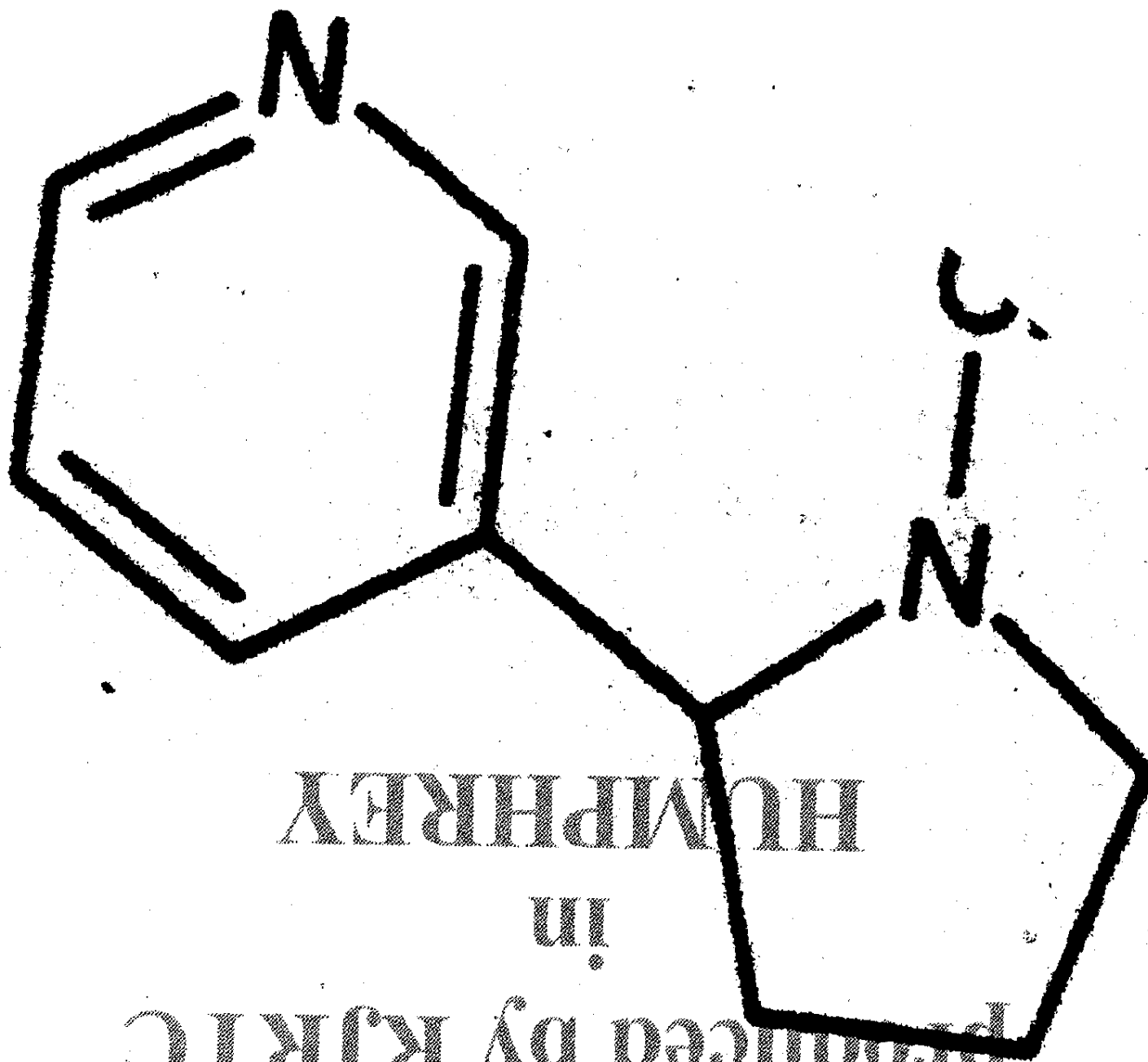
- Refer to the "Composite List of Ingredients Added to Tobacco" accompanying this report for the quantities not exceeded, and examples of other consumer products in which the ingredient is used.
- Like ingredients disclosure for food products, the flavours that each brand's unique flavour characteristics are grouped under category "natural and artificial flavours". Each flavour grouped this heading is disclosed in the "Composite List of Ingredients Tobacco", accompanying this report.
- Details of the non-tobacco ingredients can be found in the "Composite List of Non-Tobacco Materials", accompanying this report.

MARLBORO

MARLBORO LIGHTS BOX, 20S

TOBACCO
WATER
SUGARS (SUCROSE, INVERT SUGAR, OR CORN SYRUP)
GLYCEROL
PROPYLENE GLYCOL
COCOA & COCOA PRODUCTS
LICORICE EXTRACT
DIAMMONIUM PHOSPHATE
AMMONIUM HYDROXIDE
NATURAL & ARTIFICIAL FLAVOURS

[Back to Australia Ingredients Home](#)
[Click here for our policy regarding](#)
[Home](#) | [Site Map](#) | [Site Policies](#)



HUMPHREY

in

produced by RJRTC